. . . . APRIL, 1944

TECHNOLOGY DEP

THE MANUFACTURING CONFECTIONER

PIONEER SPECIALIZED PUBLICATION FOR CONFECTIONERY MANUFACTURERS

Slab Oil—A Raw Material "Orphan"
By Wesley H. Childs

This article presents the results of a slab oil survey made recently by THE MANUFACTURING CONFECTIONER *and is supplemented with material prepared by Mr. Childs, Technical Editor.*

◆ ◆ ◆

Candy Problems
By James E. Mayhew

"Retail candy stores face many raw material and labor shortages, but these handicaps can be overcome by working a little harder and faster and by learning from the past experience of successful candy makers . . ."

◆ ◆ ◆

What Users Want and Need in Postwar Packaging Machinery
By Douglas S. Kirk

"The fundamental principles or keynotes for the production of package machinery for the future must be the early or rapid development and production of high-speed, simplified equipment at a low cost . . ."

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PLANT MANAGEMENT, PRODUCTION METHODS, MATERIALS, EQUIPMENT, PURCHASING, SALES, MERCHANDISING

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Founder
EARL R. ALLURED

PUBLISHER & EDITOR
P. W. Allured

ASSOCIATE EDITOR
Edgar P. Mercer

TECHNICAL EDITOR
W. H. Childs

CLINIC SUPERINTENDENT
Eric Lehman

EASTERN MANAGER
William C. Copp

CIRCULATION
P. C. Heise

ENGLISH REPRESENTATIVE
L. M. Weybridge
21b Salisbury Rd. Hove, Sussex

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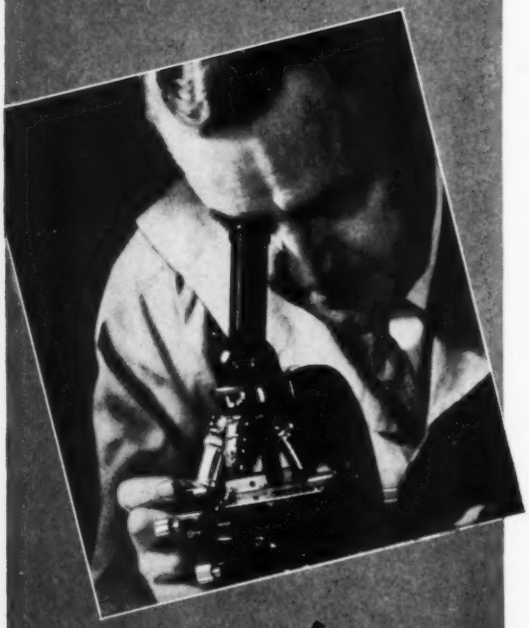
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General Offices Kansas City, Missouri

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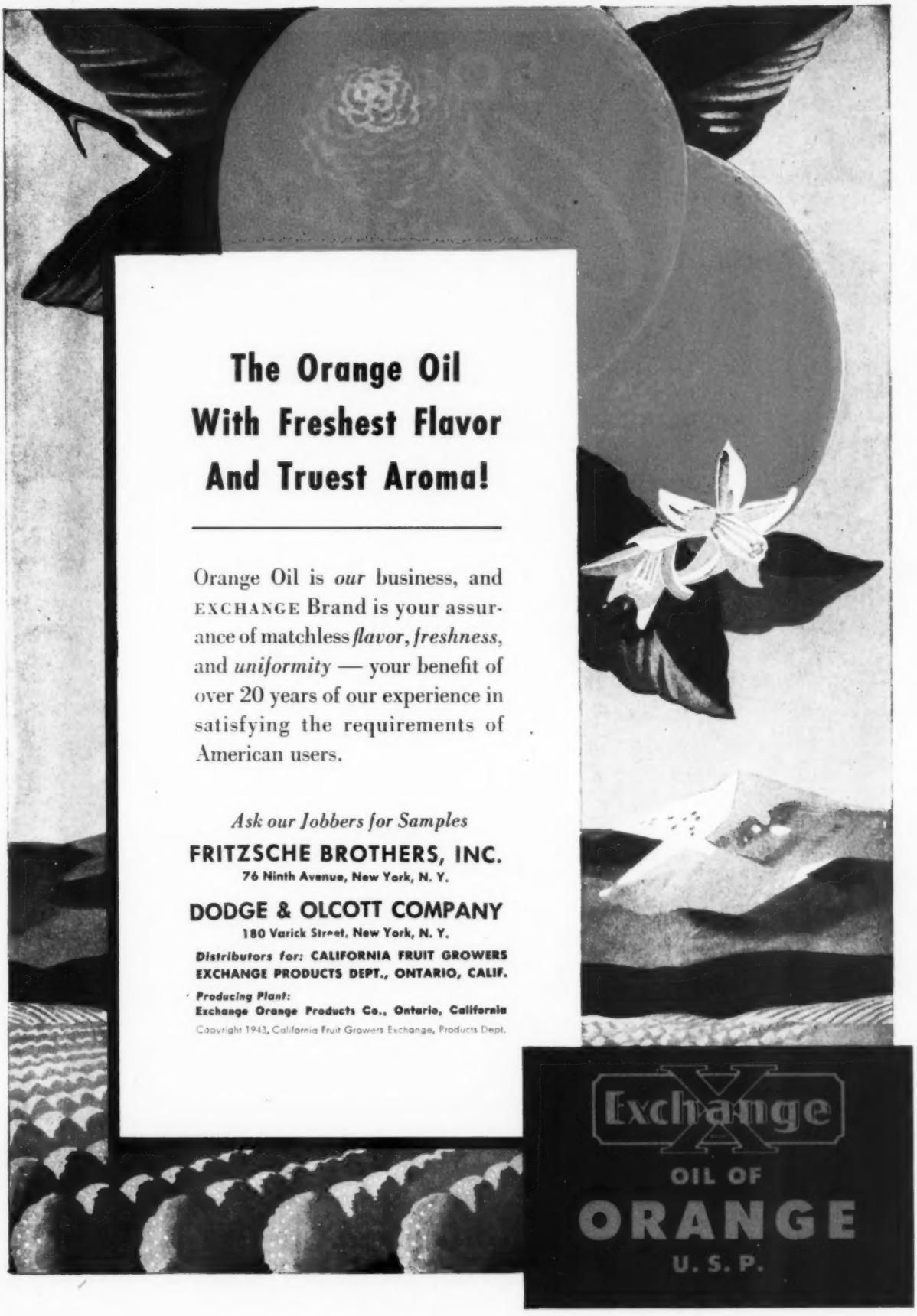
NO. 1 IN PROFITS!

There are proved profits in candies made with Cloverbloom Frozen Fresh Egg Whites . . . the profits that come from satisfied customers and steady, repeat business. From coast to coast, candy makers have learned that Cloverbloom "ups" quality; gives their goods the vital sales appeal of fine texture and fresh, natural flavor that can't be had any other way!

Key candy-makers all over America make Cloverbloom their standard. So, join the swing to Cloverbloom. Discover for yourself how Cloverbloom Frozen Fresh Egg Whites make better candy . . . more profits!

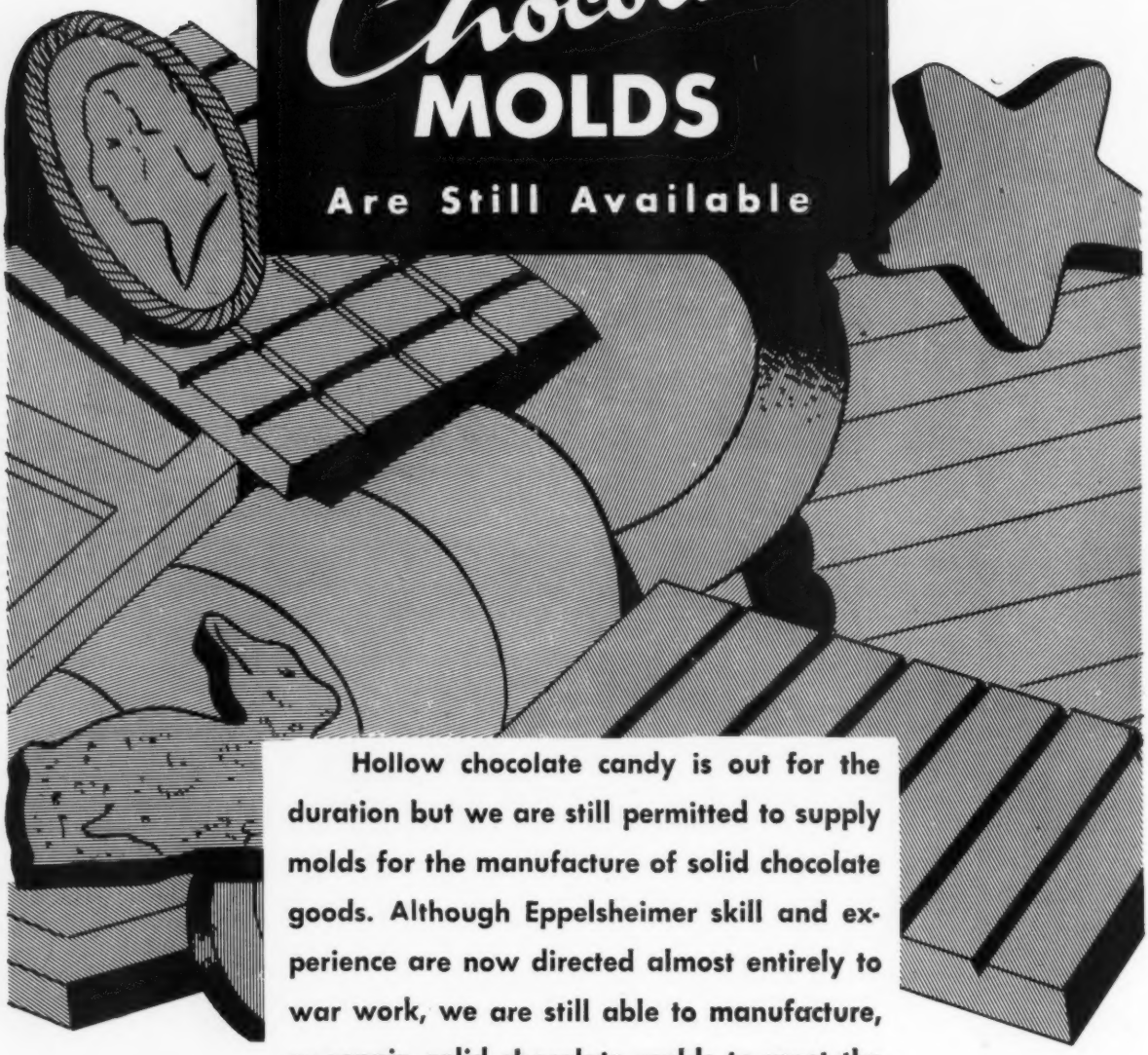
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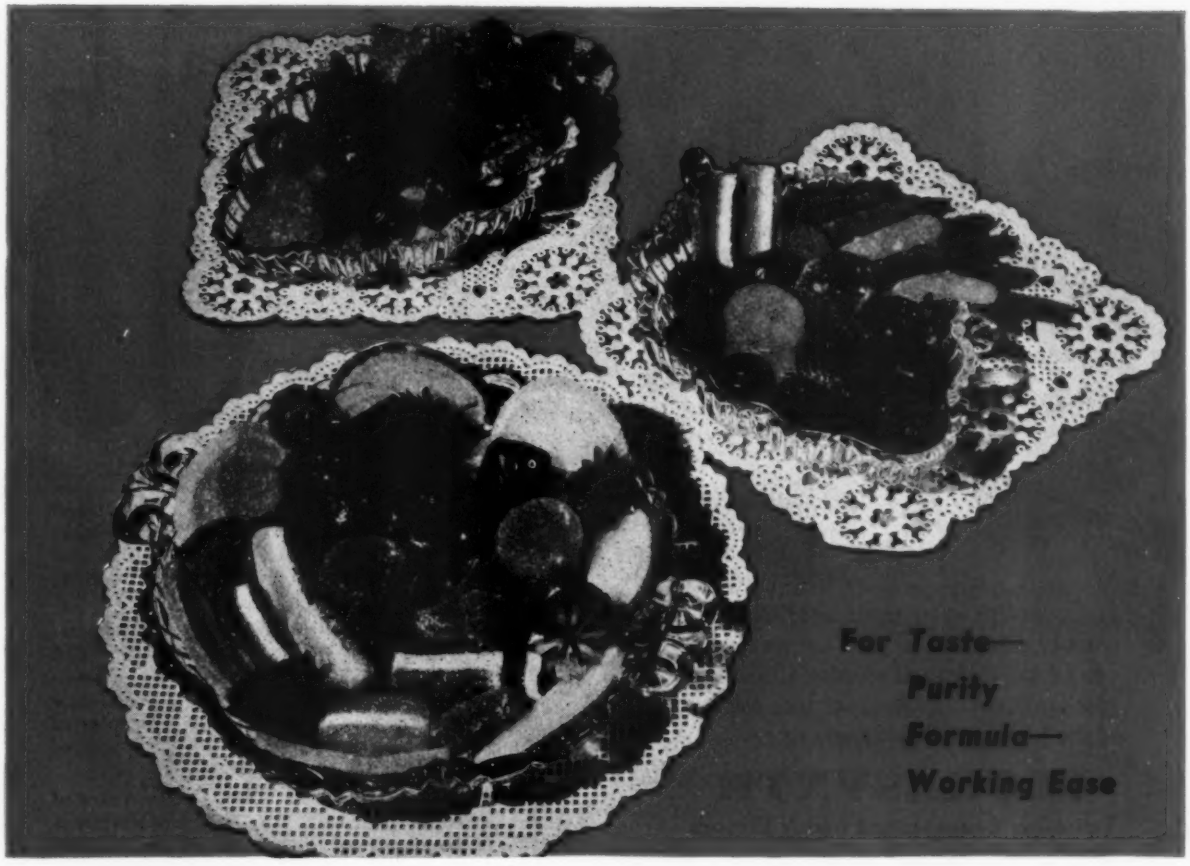
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VEG-A-LOID is a tested and proved vegetable colloid that very noticeably improves taste, purity, quality and workability of other materials. It is now the standard of a number of America's foremost candy manufacturers. Note VEG-A-LOID'S advantages—and let our Service Department tell you more about it.



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in more than
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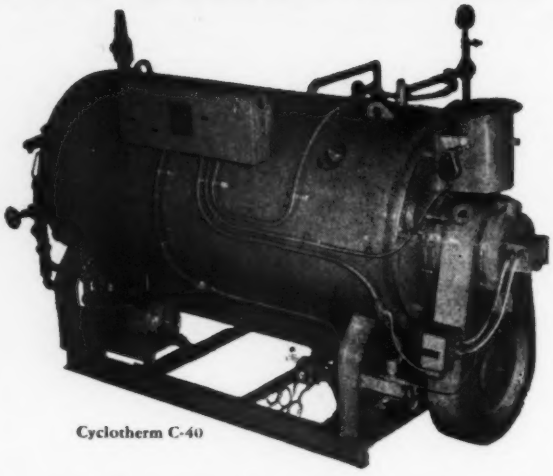
You will find them just what Jerry likes . . . what manufacturers have proved to themselves . . .

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Cyclotherms are manufactured in units from 10 to 300 horsepower. They are oil or gas fired. Some units are available now and deliveries are being made as rapidly as the press of Government orders permits. If you are planning replacements, our engineers will be glad to consult with you on any problem you may have. Write or call for additional information or any business or technical data you may wish.

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for making Shoes, Rifle Scabbards, and other leather goods



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for sizing and finishing Mosquito Netting and Head Nets



for making Games and Sporting Goods



for labeling and sealing items of Subsistence (foods)



for sizing regulation and camouflage Uniform Fabrics



for sealing Cases; making and applying Packing List Envelopes

&

for other applications too numerous to list here, important to the Quartermaster Corps in providing for the health, welfare and fighting efficiency of our army personnel.



No. 3 of a series.

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So vast a responsibility is difficult for the average person to comprehend . . . millions of troops scattered all over the globe . . . thousands of miles of supply lines under constant enemy fire . . . forces shifting, requirements changing, the unexpected happening every day.

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In an undertaking of such magnitude, the importance of adhesives and starch products, for purposes such as those shown at the left, might easily be overlooked . . . but nothing escapes the Quartermaster Corps. It is this close attention to detail that has won for the Corps the implicit faith of its dependent millions.

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That is why modern soy flour offers "a bet you shouldn't miss". For it adds high-quality protein, essential minerals and important vitamins, plus controlled amounts of wholesome vegetable fat, without increase of material costs.

What's more, modern soy flour is a bland, light-colored scientifically improved product that blends into almost every kind of food in a most highly satisfactory manner, enhancing both the nutritional and the palatable qualities of the final product.

Staley's, one of the world's largest producers of soy flour and grits, maintain a staff of food chemists and Bakery Technicians for the benefit of its customers. We have formularies developed for practically every possible application of soy flour in the food field. We shall welcome an opportunity to study your particular requirements and without obligating you in any way. Use the convenient coupon or write us at length regarding your problem.

How Soy Flour is Used in the Confectionery Field

First a substitute, then a staple, now an indispensable ingredient, soy flour is still growing in popularity as its advantages become more generally recognized throughout the candy industry. Send for full description of the uses and advantages of soy flour in candy making.

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STALEY'S SOY GRITS
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Please send me your latest scientific findings regarding the uses of soy flour in the Confectionery industry, with special reference to . . .

. . . . . .

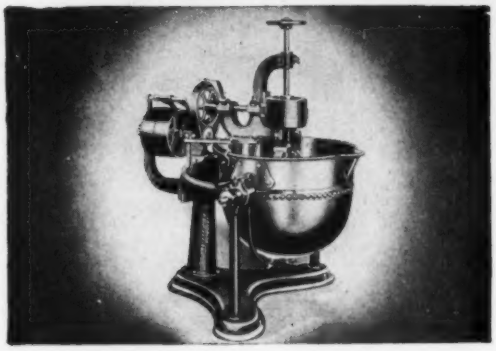
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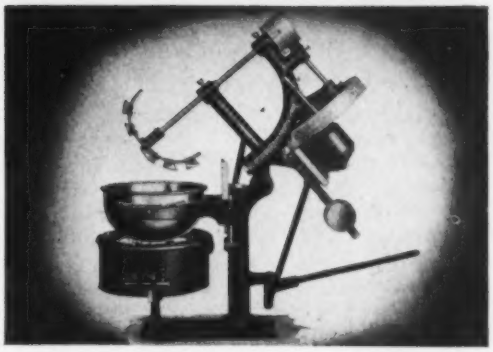
"Fighting Food" for Fighting Men

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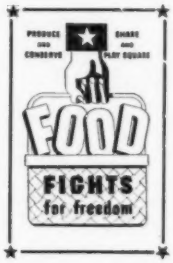


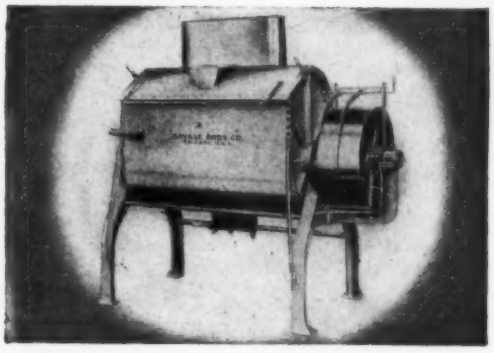
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BACK THE ATTACK

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Savage is backing up our fighting men by maintaining the equipment, which carries the SAVAGE name, in tip-top condition so that the manufacture of "fighting food", candy, is not slowed down. SAVAGE maintains a service department, described here, which is ready to help you "keep 'em running!" Our service department was established to help you keep your machines in good repair. SAVAGE machines are built to take hard wear. So, given the added help of constant repair, they will double their lifetime of active service. There's hardly a plant in the industry which does not have some piece of SAVAGE equipment, giving faithful and efficient service.

"We can't sell you any new machines now, unless you secure priority rating in accordance with General Limitations Order L-292, and we can secure allocation for needed materials."

***"IMPORTANT:* You are now allowed to purchase used or rebuilt machines, *IF AVAILABLE*, without priority rating!"**

Since 1855

SAVAGE has given almost a century of service to manufacturing confectioners. This long record of high-quality machinery production plus efficient repair service has made the name SAVAGE synonymous with candy machine quality.

SAVAGE BROS. CO.

2638 GLADYS AVE., CHICAGO, ILLINOIS



EDITORIAL



A United Front

For years, the candy industry has been aware that a public relations job needed to be done for the products manufactured by the industry. Spasmodic programs have been set up, but no long range planning had been done, therefore, the programs usually came to an abrupt end.

Individual companies have, at various times, included public relations for the industry in their plans but these plans were naturally limited by individual problems and budgets.

Several years ago, a committee was set up within the industry and a slogan devised:

"CANDY IS DELICIOUS FOOD, ENJOY SOME EVERY DAY!"

This was an ambitious program, well planned and executed both through manufacturing and distribution channels.

The Council on Candy as Food in the War Effort, formed in November, 1942, is a continuation of these early efforts. Wisely, the Council tied-in its plans with the work previously done.

As one of its first efforts, a radio program was initiated. This program, "Washington Reports on Rationing," was a series which proved to be very successful and timely and which achieved high recognition.

The Council, following up its radio series, is now promoting a million-dollar campaign to further advance public recognition of candy as a food. This program will extend over a two year period. Plan calls for:

Appointment of 21 regional campaign managers in as many strategic centers who, in turn, will appoint hundreds of district managers for intensive work in their territories; creation of separate committees to enlist the suppliers and other affiliated interests; a series of regional meetings across the country, starting with a Chicago meeting on April 12th, to be followed by meetings in Boston, New York and Philadelphia and elsewhere across the country; approval of campaign materials including a 28-page book containing a digest of findings in its nation-wide survey and sample advertisements in full color; and, the release of a double-spread, trade paper advertisement serving notice on the industry that the big program is under way.

THE MANUFACTURING CONFECTIONER has constantly stressed the importance of candy as a food. Efforts have been made towards awakening the industry to the dangers of the future. Certain agencies, slapping candy for their own selfish interests, have been very aggressive. As a result of this anti-candy propaganda, strong negative trends of thought have threatened to change the attitude of millions of Americans.

A large, Chicago newspaper, in an editorial, said recently:—"The *confectionery industry* is one of the vital war industries.

"The armed services buy *millions of candy bars* every month.

"Every ration packed for a soldier in the field includes *candy*.

"And *candy* is consumed in enormous quantities by civilian workers in the nation's war factories.

"*It is not a luxury* but an indispensable and highly-concentrated, energy food.

"A stoppage or even a serious reduction in its production would be, therefore, a *serious setback* to the war effort."

The creation of further goodwill and the education of the public to the place candy holds in the food industry means continuous, long-range planning for success. It will require the complete participation of every candy manufacturer, the supply field, jobber, and retailer of candy, as well as candy salesmen and brokers. We must present a united front.

Time, money and effort will be needed to put this campaign across. Now is the time to show your belief in candy. You can show it by your contribution whether it be in time, effort, money, or all three.

Co-operation in Carton Conservation

Starch is not the only cause of gray hair in the candy industry. Sugar rationing, labor shortage, the critical corn syrup situation and now container rationing, test the astuteness of the confectionery industry.

Briefly, WPB's L-317 Ruling, limits the use of container-board content of new fibre shipping containers, including "re-shippers," for candy to an 80 percent quota based on 1942 usage. Popcorn, candied and otherwise (except unpopped) has a quota of 65 percent.

This ruling is not unexpected. THE MANUFACTURING CONFECTIONER of November 1943 in an article, "Container Shortage," clearly pointed out the critical container condition. The industry was urged to co-operate in the rehabilitation of cartons and cases for re-use. This article gave instructions on the proper methods of salvage involved in the recovery of cartons for re-use.

That this matter is critical may also be judged by the inclusion of a paper on the subject at the recent Packaging Conference. Mr. Martin L. Jack of the Curtiss Candy Company, Chicago, in his address, "Paper Conservation and Container Re-Use," told what his company has done.

Recently, the Chicago Candy Association appointed a committee of prominent candy men to get action in regard to the container situation. Plans have been made to operate a "Clearing House," a central warehouse where customers can send returned cartons and after sorting, be picked up by the manufacturers who then reclaim them for re-use. This is a co-operative movement—starting with the manufacturer and continuing to the distribution and retail field.

It must be remembered that re-used containers must meet all State and Federal requirements. Sanitary precautions must be observed.

The alarm has been sounded; instructions have been

(*Please turn to page* 39)

Slab Oil--A Raw Material "Orphan"

By W. H. CHILDS,
Technical Editor

This article is the first of a new series planned by the Editors of *THE MANUFACTURING CONFECTIONER*. The series will take up many neglected materials as used by the candy man. Subsequent articles will appear on such items as salt, sodium benzoate, sulphur dioxide, stearic acid, etc.

Strange to say, when one reads the list of ingredients on a candy label, ones does not think of other necessary ingredients which are used. Some candies are cast in starch. It is difficult to remove all of the moulding starch, yet it is not a trade practice to declare moulding starch on the label of ingredients. Slab dressing plays a similar role: its use is necessary in making certain kinds of candy, yet it is not considered as an ingredient.

The amount of slab dressings used in the confectionery industry is small but any material used may play an important part in the quality of the candy. Oftentimes, these so-called minor items are neglected and as a result, off-flavors or other troubles occur.

There is only one function of slab dressing, that is to prevent candy from sticking to the slab. As shown in the table, slab dressings are used primarily for chewy candies, coconut batches, crunch and glace, nougats and hard candy. Slab dressings may be either of vegetable or petroleum origin. Each has its merits.

The vegetable oils or fats offer some nutritive value, while mineral products do not. But as very small amounts are used per batch, this "nutritive factor" may be discounted. Some vegetable oils tend to become rancid. However, mineral or petroleum products occasionally show an off or "kerosene-like flavor.

To prevent rancidity is a major problem. About the only steps to take to safe-guard products are to (1) use a U. S. P. quality grade, (2) check material used, and (3) use as little as possible.

An accelerated temperature test offers one means of checking the quality of slab dressing used. A check on amount used may be made by dissolving the candy in water. Some hard candies in the past when dissolved in water, have shown excessive amounts of insoluble matter.

It is well to remember that oil and water do not mix. When a slab is washed, it should be dried thoroughly before more slab dressing is applied, otherwise, good coverage will not result and sticking will occur. In case of shut-downs, a coating of dressing will keep the slabs and equipment in good condition.

Some candy makers use slab dressings on the inside of pans and kettles. Vacuum cookers may be more easily kept clean when a little dressing is applied to the inside surface, just above the batch. Beeswax may be used. Recently, a temporary use of slab oil has been as a glazing material "stretcher."

THE MANUFACTURING CONFECTIONER recently made a cross-section survey of the candy industry covering its usage of slab dressings. The composite findings are summarized in the following table.

TYPE of FIRM	I Type of Oil		II Kind of Oil			III Quantity Used	IV Uses-Process
Volume Manufactured a Year or Number of Employees	In Grease Form	In Liquid Form	Mineral	Vegetable	Animal Fat	Amount per Year or Amount per batch	Kinds of Candy or on what equipment
35 Emps., 150,000 lb. yr.	.....	X	Question II omitted in first group but some answered.			30 gals. a yr.	"Slab Work"
20 in Hard Candy Dept., but 400 Emps. total	.....	X				Not given	"Hard Candy Slabs"
A quality assort. choc. co.	.....	X	.....	X	.....	Not given	
A large 5c package firm	.....	.....	.....	.....	.....	Use none	"Make no hard candy"
A specialty plant	.....	.....	.....	.....	.....	Use none	"Sorry, don't use"
225 Employees	.....	X	.....	.....	.....	600 gals. a yr.	"For caramels, and chewy candies"
60 Emps., 300,000 lb. yr.	.....	X	.....	.....	.....	10 gals. a yr.	"On cooling tables"
$200,00 worth a yr.	X	X	.....	.....	.....	10 gals. a yr.	"Slabs only"
50 Employees	.....	X	.....	.....	.....	12 gals. a yr.	"Coconut Batches and Nougats"
Over 1000 Employees	X	X	.....	.....	.....	1000 lbs. a yr.	"To grease pans, slabs and kettles"
No data given	.....	X	.....	X	.....	Not given	"Hard candies"
600 Employees	X	X	X	.....	X	*Note*: "We use mineral oil on slabs for hard candy and salt pork to grease slabs and pans for caramels."	
			Question II is included in following				
137,000 lb. a yr.	.....	X	X	.....	.....	5 gals. a yr.	"Hard & chewy candies"
60 Employees	.....	X	X	.....	.....	900 gals. a yr.	"Few oz. per slab"
65 Employees	.....	X	.....	.....	.....	160 gals. a yr.	Crunch & Glace
200 Employees	.....	X	X	.....	.....	4 oz. a 100 lbs.	"Nougatines, caramels"
146 Employees	.....	X	X	.....	.....	300 gals. a yr.	"Slabs for Taffies"
7 Employees	.....	X	.....	.....	.....	100 lbs. a yr.	"Hard Candy"
50 Employees	.....	X	X	.....	.....	9 Drums a yr.	"On marble slabs"
10 Employees	.....	X	X	.....	.....	52 gals. a yr.	"Slabs & Steel tables"
No data given	.....	X	.....	X	.....	"Not much"	" on slabs"
Big specialty firm	.....		.....	.....	.....	"None used"	"Not needed in our piece"

TECHNICAL LITERATURE DIGEST

Racemic Menthol, New Synthesis from Thymol

A. L. Barney and H. B. Hass, Ind. & Eng. Chem., Vol. 36, No. 1 (1944)

Description of new synthesis of racemic menthol from thymol which is readily available. High yields obtained and ease with which the by-products may be recycled, add to attractiveness of the physical separation method. Product is indistinguishable in taste and odor by average chemist from recrystallized l-menthol. Pharmaceutical differences are slight.

White Potato Starches

P. E. Meiss, R. H. Treadway and Lee T. Smith, Ind. & Eng. Chem., Vol. 36, No. 2 (1944)

Aparent viscosity or consistency of a starch paste varies with the rate of shear. For comparison, consistencies of starch pastes should be measured at the same rate of shear and with same instrument. Consistency of starch paste is influenced to great extent by conditions of preparation, measurements must be made at several points during cooking process. Discussion of relation of consistency to particle size.

A Study of Petroleum Microcrystalline Waxes

Dr. R. B. Killingsworth, The Amer. Perfumer, Vol. 46, No. 1 (1944)

Increasing application of these products for variety of industrial uses has attracted attention. Because of excellent performance as moisture-proof coatings and laminants, they have been placed under government allocation in order to direct supply to most essential war applications. Data given on physical constants of M-C waxes.

Proteins in Human Nutrition

Ross A. Gortner, Jr. and Frank L. Gunderson, Chem. & Eng. News, Vol. 22, No. 3 (1944)

In pre-war years, 52% of protein in average American diet was of animal origin. Because of war demands, civilians must subsist on less animal protein. Sources of other proteins available at present are fish, soybeans, yeast, peanuts and cereal germs. Fish supply is adequate.

Soybeans are being accepted slowly. Dried yeast production is increasing and offers hope for improving diets of people on low standard of living. Peanut meal can be produced suitable for human consumption. Likewise cereal germs can be made palatable. There is no true shortage of protein of high biological value in this country but a dietary change in our habits is necessary.

Observations on Fishiness in Butter

R. V. Hussong, Sidney Quam and B. W. Hammer, Jour. Dairy Science, Vol. 27, No. 1 (1944)

Occasionally encountered but not as common as in previous years. Fishy butter commonly has lower pH than non-fishy butter from same plants at about same periods. In cases where fishy butter had a relatively high pH value, it contained comparatively large amounts of copper. When fishy butter was separated into fat and serum, the fishy flavor was conspicous in the fat but there was little or no fishiness in the serum.

Oxidative Rancidity in Edible Fats

L. R. Bryant, Food in Canada, Vol. 4, No. 1 (1944)

This is number four in the series. Undesirable changes in odor and palatability of food fat caused by oxidative rancidity are serious. Other changes are associated with this. Factors involved are given and inhibitors listed.

Lactic Acid in Chocolate and Confectionery

Conf. Product., Vol. 10, No. 1 (1944)

Advantages of lactic acid given from health standpoint. Incorporation of acid in chocolate patented in Vienna (no number or data given). Concentration over 2% inadvisable. Post-war food field offers possibilities for lactic acid but much experimentation will be required.

Fluorescence Analysis in the Food Industry, Part 2

J. A. Radley, Food Mfg., Vol. 19, No. 1 (1944)

Fluorescence gives indication of history of fat or oil. Detection of adulteration aided by fluorescence behavior. Can tell difference between spray and roller dried milks by fluorescence when these are reconstituted. Many refer. ences given.

Gum Karaya

Charles F. Mason, Chem. Ind., Vol. 53, No. 7 (1943)

Properties are given. To make a dilute dispersion of gum in water stir dry gum into total amount of water with aid of colloid mill or homogenizer and allow to stand 24 hours before use. Karaya is superior and less is necessary to produce a dispersion than gum arabic for thickening purposes.

Locust Bean Gum

Charles F. Mason, Chem. Ind., Vol. 54, No. 1 (1944)

Table given of properties of locust bean gum, gum karaya and gum arabic. Locust bean gum suggested as substitute for tragacanth. It comes to buyer in cleaner form. Is used for thickener and emulsifier. Avoid making water dispersion of untreated gum of over 4% total solids and when making less than 4% dispersions, use heat and stir in the presence of a preservative.

Spices and Seasonings for Bakers

Lloyd A. Hall, Spice Mill, Vol. 67, No. 2 (1944)

War has forced attention on spices and their replacements. Suggestions on seasonings for bakers made which may find application to candy man interested in achieving individuality in their candy line. Stability is slightly lacking in some of the replacements but it is expected that many replacements will find a permanent place in industry.

A Good "Black" Market

The Chicago Candy Club recently presented a gala program to members of the manufacturing, jobbing and sales fraternity. Five cent candy bars were sold on "the black market" to their manufacturers at 25c each. Proceeds of this operation were used to buy approximately 10,000 candy bars for the servicemen's center and the balance of the fund was given to the Red Cross. The overwhelming success of this party indicates the beginning of annual events of similar nature.

Parker Heads Pangburn Co.



I. C. Parker

The Pangburn Candy & Ice Cream Co., Fort Worth, Texas, has announced the election of Mr. I. C. Parker as president and general manager of the company. He became associated with the company in 1926 as a member of the advertising department. Under his direction, distribution of Pangburn products has been extended to national scope. Mr. Parker has served on the WPB and FDA and was a director of the National Confectioners' Association from 1938 through 1941.

Coming Events

The Gopher Candy Club's Eighth Annual Friendship Dinner, May 13th, 6:00 P.M., Hotel Nicollet, Minneapolis, Minn.

Mother's Day—May 14th—of especial importance this year.

The Flavoring Extract Manufacturing Association of the U. S. meets May 22nd and 23rd at Hotel New Yorker, New York City.

The Associated Retail Confectioners' War-Time Conference will be held at Hotel Roosevelt, New York City, June 4th through June 7th.

The National Confectioners' Association will hold its annual convention at the Waldorf-Astoria, New York City, June 6th through June 8th.

OPA versus Candy Companies

Triple damage actions against 17 wholesale candy dealers charged with ceiling-price violations were started in the Federal courts in Manhattan and Brooklyn on March 21st by the OPA regional office. The actions were based on consumers' complaints. It is reported that five cent packages of chewing gum and candy were currently selling for six or seven cents. The OPA is asking for injunctions which will forbid price violators to charge more than the legal ceiling (as of March 1942) under penalty of facing contempt of court actions. The OPA is continuing its investigation of price violations in the candy industry. The amount of damages asked by the OPA of these 17 dealers is in excess of $1,000,000.

The OPA accusses 31 candy concerns in the New York area doing a business of $10,000,000 of gouging children by not giving them a fair return for their pennies. Failure to comply with Government price regulations is the charge against all 31. Some of these concerns are also on the "spot" with the Health Department for unsanitary conditions prevailing in their manufacturing plants as reported in the indictment, also one company had solved (?) the paper shortage by using old handbills for candy wrapping.

The Manufacturing Confectioner Expands

THE MANUFACTURING CONFECTIONER'S New York staff has moved into larger quarters as of April 1st, at the same address, 303 West 42nd Street, New York 18. Additions to the staff makes the move necessary. The new quarters will also furnish better library facilities for visitors.

Mr. Harold Sugarman, honorably discharged from the U. S. Coast Guard recently, and a graduate of Boston University, has joined The Manufacturing Confectioner's New York staff for advertising research and account service work.

Members of the industry are invited to call at the New York offices of THE MANUFACTURING CONFECTIONER when in New York City for business or pleasure.

Members of the NCA Council on Candy, Board of Directors and other candy manufacturers at their two day session in Washington, March 2-3. Seated (l-r) J. W. Hicks, representing Otto Schnering, Curtiss Candy Co.; Harold S. Clark, D. L. Clark Co.; Bob McCormack, Bobs Candy & Peanut Co.; Z. E. Vose, National Candy Co.; Charles F. Scully, Williamson Candy Co.; NCA President Philip P. Gott; John H. Reddy, New England Confectionery Co.; Paul R. Trent, Schutter Candy Co.; Theodore Stempfel, E. J. Brach and Sons; William J. Lavery, Curtiss Candy Co.; W. C. Dickmeyer, Wayne Candies, Inc.; John W. McKey, Euclid Candy Co. of Calif.; and Harry L. Brown, Brown and Haley, Tacoma, Wash.

Standing (l-r) L. B. Templeton, Schutter Candy Co., N. Y.; Jack Shaw, Leo Burnett Co.; Charles F. Haug, Mason, Au & Magenheimer; Walter Richards, Tom Huston Peanut Company; E. O. Blomquist, E. J. Brach and Sons; Herman L. Hoops, Hawley & Hoops; D. P. O'Connor, Penick & Ford; Charles C. Chase, Chase Candy Co.; Charles R. Adelson; Delson Candy Co.; Robert Welch, James O. Welch Co.; James O. Welch, James O. Welch Co.; Herbert Ziegler, Geo. Ziegler Co.; E. R. Wood, Pan Confection Factory, National Candy Co.; Paul G. Sandell, Miss Morris Candies, Inc.; I. C. Parker, Pangburn, Inc.; Irvin C. Shaffer, Just Born, Inc.; O. G. Trudeau, Trudeau Candies, Inc., Thomas A. Ryan, NCA Executive Assistant; and Olin Davis, King Candy Co.



A Survey of

AMERICAN AND EUROPEAN PEPPERMINT OILS

By DR. ERNEST GUENTHER
Chief Research Chemist,
Fritzsche Brothers, Inc.

PART VII

THE beginning of the Russian peppermint industry dates back to the last century when native varieties were distilled. Around 1895, the English black mint, *Mentha piperita* var. *vulgaris*, was introduced to the Ukraine and planted in the Agricultural Experiment Station. Favored by the rich, black soil of that part of Russia, the plantings were extended and steam distilleries erected. Around 1914, production reached about 20,000 pounds of oil.

It was only during the ten years preceding the present war that Soviet Russia started to expand its potential peppermint industry. This long range program was accompanied by scientific work in the various agricultural experiment stations and resulted in a tremendous increase of peppermint oil production which, in 1939, reached about 330,000 pounds. Exact figures are not available but it may be estimated that about 190,000 pounds of oil were consumed domestically, and about 140,000 pounds exported. Thus, Soviet Russia, before the present war, had become Europe's greatest peppermint oil producer.

About 15 years ago, the Russian oil was considered somewhat inferior in regard to quality as it usually contained a substantial percentage of menthone and only 45 to 50 per cent menthol. Since then, however, considerable progress has been made. Strausz[1] claims that the Ukraine produces excellent qualities with 53 to 58 per cent menthol, 10 to 14 per cent menthones and almost free of resin. The top qualities, however, orignate from the regions north of the Caucasus, the oils containing 53 to 55 per cent menthol and only about 9 per cent menthone. The odor and flavor of these oils are sweet, strong, and somewhat spicy, resembling Mitcham oils.

A discussion of the numerous investigations as carried out in the various experiment stations would lead too far; besides, the results in several instances are contradictory. Suffice it to mention the findings of only a few workers. Sardanowsky[2] reported that the oil accumulates in the leaves and reaches its maximum in the period between the formation of blossoms and blooming. The menthol content of the oil increases as the plant matures and attains its maximum toward the end of the blooming period.

More Oil from Mature Plants

The ester content increases during the formation of blossoms, slightly decreases during bloom and finally increases again. Leaves which have dropped and remained on the ground not more than two weeks, without fermenting, contain relatively small amounts of oil, but the oil is rich in menthol and esters. Rutowski and Trawin[3] showed that the menthol content of the oil increases while the menthone decreases as the plant grows and matures. Tables proving this contention have been given in a previous chapter.

Two samples of rectified Russian oils which were analyzed in our New York laboratories showed the constants as given in Chart No. 1:

Gildemeister and Hoffmann[4] indicate the constants for Russian peppermint oils as shown in Chart No. 2:

The following compounds have, so far, been identified in Russian peppermint oils:

dl-α-pinene Identified by Schindelmeiser[5] as nitrosochloride, m. p. 103°C, and as nitrolpiperidine, m. p. 118°C.

l-limonene Identified by Andres and Andreef[6] in the fraction, b. p. 173 to 175°C, atmospheric pressure, as tetrabromide, m. p. 102°C; as nitrosochloride, m. p.

Chart No. 1	I	II
Specific Gravity at 25°C	0.899	0.900
Optical Rotation	-25°10′	-26°45′
Refractive Index at 20°C	1.4610	1.4610
Total Menthol Content	55.2%	56.8%
Ester Menthol Content	5.6%	6.6%
Menthone Content	23.2%	23.8%
Solubility at 25°C	Clearly soluble in 3 volumes of 70% alcohol.	

Chart No. 2	
Specific Gravity at 15°C:	0.902 to 0.909
Optical Rotation:	-21° to -29°15′
Refractive Index at 20°C	1.459 to 1.472
Content of Ester Menthol:	3.1 to 12.5%
Content of Total Menthol:	47 to 57%
Content of Menthone:	21 to 25.4%
Solubility:	Soluble in 2.5 to 3 volumes of 70% alcohol; a dilute solution is sometimes opalescent.

103°C; and as dihydrochloride, m. p. 49.5 to 50°C.

dipentene By Schindelmeiser[7] as tetrabromide, m. p. 125 to 126°C; as nitrosochloride, m. p. 103°C; and as carvone oxime, m. p. 92 to 93°C.

cineol Also by Schindelmeiser as HBr compound, m. p. 57°C.

d-and l-menthone Schindelmeiser isolated a mixture of d-and l-menthone, in which the l-modification predominated, while in the mixture of menthones as isolated by Andres and Andreef[8], the d-modification predominated.

menthol free and esterified with *acetic* - and *valeric acid* } Identified by Andres and Andreef as well as by Schindelmeiser.

Bulgarian Peppermint Oil

During the last prewar years, Bulgaria became a very important peppermint oil producer. In fact, the rise of Bulgaria's peppermint industry from practically nil to such a strong position in Europe is remarkable. The beginning of peppermint production in that country dates back to about 1923 when some roots of Mitcham type black mint were introduced from Hungary. The venture, however, failed some years later. Only one farmer retained a few of those peppermint plants in his garden which increased during the following years until several acres could be planted.

The world's economic crisis of 1929 to 1932 depressed the price of rose oil to such low levels that many Bulgarian rose growers became disappointed and started to look for other more lucrative crops. Several farmers planted peppermint from the old plants which had been introduced several years ago from Hungary, and distilled the oil. It proved to be of excellent quality, resembling the Italo-Mitcham type. From then on, the newly established industry developed rapidly and to such an extent that, in 1938, Bulgaria produced about 140,000 pounds of peppermint oil, two-thirds of which usually went to Germany, the balance to France and England. The oil has even been offered in the United States.

The producing regions are near Karlowo, between the rivers Strjema and Tundza. Peppermint is also grown succesfully around Svistov on the Danube, in Northern Bulgaria, furthermore in the plain of Sofia.

The Bulgarian peasants being skilled gardeners and the country offering soil and climatic conditions comparable to our Middle West, it is not surprising that Bulgaria, today, produces an excellent quality of peppermint oil. In fact, the Bulgarian oil has a somewhat "American" character: it possesses a high menthol content (52 to 61%) and can be compared with out best brands.

A sample of genuine Bulgarian peppermint oil analyzed in our New York laboratories showed the following constants. (See chart No. 3):

Specific Gravity at 25°C:	0.907
Optical Rotation:	-19°52′
Refractive Index at 20°C:	1.4629
Ester Menthol Calculated as Menthyl Acetate:	5.5%
Total Menthol Content:	55.2%
Solubility:	Soluble in 3 to 3.5 volumes of 70% alcohol; opalescent to cloudy with more.

Chart 3

It is not known, at present, how far the war in Europe has affected Bulgaria's peppermint industry which has made such a promising start and attained a prominent position in Europe.

Italian Peppermint Oil

The beginning of Italy's peppermint oil industry was modest and dates back to about 1800 when only native varieties, for instance, *Mentha piperita* var. *piedmontese*, was grown and that on a very small scale. The oil distilled from this plant, however, was inferior and could not be exported. Around 1880, a French variety was imported from Grasse and naturalized in Piedmont; the oil was of good quality but the yield very inferior.

After 1900, the English (Mitcham) black mint, *Mentha piperita* var. *vulgaris* was introduced and planted on a large scale. The first harvest and distillation of Italo-Mitcham peppermint took place in 1903. Compared with the native mints and the white Mitcham, the black English is more resistant against climate, diseases and pests; furthermore, it is higher yielding.

According to Carles[9], the Po plain south of Torino with its light, fertile, alluvial topsoil (clay rich in silica) and its moist subsoil is ideally suited for the growing of peppermint. The winters are cold with snowfall, spring frosts rare, the summers warm and quite dry; the land is irrigated, labor abundant and low priced. One acre yields about 44 pounds of oil. One hectare (equals 2.47 acres) produced at least 26,400 pounds of plants, normally 44,000 pounds.

The Italian peppermint industry reached its zenith in 1926 when more than 250,000 pounds of oil were produced. Since then, production has been decreasing until it reached, with yearly variations, about 75,000 pounds in 1939. It is not known how seriously the war has affected Italy's peppermint industry.

The producing regions are located in the fertile plains of Piedmont (in the provinces of Torino and Cuneo), furthermore in the province of Ferrara, near the Adriatic. The center of production is around Pancalieri near Torino, with Serravalle (Ferrara) following. During 1935, there existed some 60 distilleries in Piedmont comprising more than 200 stills. Some of the stills are antiquated direct fire stills, others of fairly modern construction. There also exist a few large distilleries equipped with efficient steam stills of about 2500 to 3500 liters capacity, constructed either in Grasse (France, A. M.) or in Italy, according to plans designed by the experienced constructors in Grasse.

Italian peppermint is planted every spring from rootstocks. After rootstocks have been taken from a field, the latter is plowed for other crops. It is left fallow during the winter, planted with wheat the following spring and with maize or hemp for another year. Thus the crops are rotated, the same field being replanted with peppermint every third year. The plants are set out 10 cm. distant, in rows 15 cm. apart, fertilized with stable dung and with nitrates in August. Harvesting takes place at the end of August when the plants are about 60 to 80 cm. high.

The cut plant material is distilled when "clover dried", in other words, without excessive drying in the sun. About 420 to 440 pounds of plants give, on an average, one pound of oil. The oil yield is, therefore, about 0.23%.

Italian oils reached the market under the label of Italo-Mitcham oils because the plant was originally imported from Mitcham. The main consumers before the war were France, Germany, England and, of course, Italy. The quality of the

Italo-Mitcham oils enjoys a very high reputation, the odor is sweet, the flavor very mild but somewhat lacking in spiciness for which reason it has been suggested to employ rectified Italo-Mitcham oils in conjunction with rectified American oils.

Physico-Chemical Constants

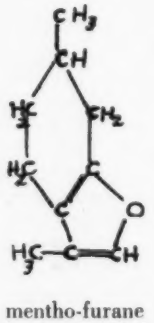
According to Gildemeister and Hoffmann[10], the constants of Italo-Mitcham oils vary between the limits shown in Chart No. 4:

The chemistry of Italian peppermint oil has not been investigated as thoroughly as that of the American oils because it has probably always been assumed that its composition is fundamentally identical with that of American oils, both oils beng derived from closely related plants.

Distilling fresh, blooming peppermint, Carles[12] obtained an oil and isolated from it a compound which, so far, had not been observed in peppermint oil. The new constituent contained oxygen, showed a high specific gravity (0.965) and strong dextro-rotation (+88°). It was apparently not present in oils distilled from young plants before they had reached the blooming stage. On the other hand, the compound was isolated also from two oils which were distilled exclusively from flowers.

These two oils had a specific gravity (at 15°C) of 0.9409 and 0.9364; an optical rotation (at 20°C) of +30°10′ and +24°40′. The high specific gravity and the dextro-rotation of these two oils permit the conclusion that the new compound is present mainly in oils distilled exclusively from flowers. Thus, it is formed in the plants, and gradually reaches a maximum (about 10% of the oil) during the blooming period and disappears as the menthol content increases.

mentho-furane The compound was finally identified by Wienhaus and Dewein[13] as 3,6-dimethyl-cumarone-tetra-hydride-(4, 5, 6, 7), and named mentho-furane. Upon exposure to air mentho-furane is oxidized to a colorless acid, m. p. 186°C, which has not yet been further investigated.



Treibs[14] succeeded in synthesizing mentho-furane from pulegone. Following Treibs' synthesis, we prepared mentho-furane in our laboratories and found it to possess a rather bitter, harsh, cymene-like odor which does not seem to contribute favorably to the odor and flavor qualities of a good peppermint oil. It is quite possible that mentho-furane occurs, not only in Italian but also in other peppermint oils.

In the first installment of this survey on peppermint oil by Dr. Guenther, which appeared in the October issue of THE MANUFACTURING CONFECTIONER, a history of peppermint strains now being grown is given as well as a comparison of native varieties of the mint with those of Japan. "The first peppermint grown in the United States, originated from England," explains Dr. Guenther in the second part of the survey appearing in November. Charts show the amount of oil per acre obtained in the important producing areas as well as approximate planted acreage. Methods of planting and cultivation were discussed.

Methods of harvesting peppermint was discussed in the December issue. In that portion of the article, Dr. Guenther discussed the production of oil from plants in various stages of maturity and pointed out that menthol content increased as the plant matured but that menthone decreased with the age of the plant.

Most farmers prefer to dry the mint hay quite thoroughly, before distillation because it is easier to handle, less bulky, and yields the oil much more readily during distillation, consuming less steam, fuel and time, according to the January installment. Some research has led to the belief that better results may be had by distillation of the green plant material, but these facts were not borne out by the results of other studies. Dr. Guenther points out both sides of this question and tells where the differences lie.

In February, he has talked about the insect pests that cause peppermint production losses as well as various diseases of the plant. He also discusses the storage of the oil, and explains the terms "redistillation" and "rectification by distillation." Charts giving important chemical data are included in this portion of the survey. Last month, directions for making peppermint oil analysis was one of the highlights of that portion of the survey. Determination of free menthol content as well as a determination of menthone were other factors described. Compounds identified in American peppermint oil, were listed approximately according to their boiling points.

This month, Dr. Guenther talks about European production of the oil and will continue and finish this important discussion in the May issue. This survey is a very complete and valuable contribution to the literature pertaining to raw materials, flavors in particular, as used by the confectionery industry.

1. *Drug and Cos. Ind.*, March 1940, 290.
2. *Pharm. Journ., Kharkov*, 1929, 124.
3. *Riechstoff Industrie* 4 (1929), 124.
4. *Die Ätherischen Öle*, 3rd Ed., Vol. III, p. 854.
5. *Apotheker. Ztg.* 21 (1906), 927.
6. *Ber. d. Deut. Chem. Ges.* 25 (1892), 609.—*Pharm. Zeitschr. f. Russl.* 29 (1890), 341.
7. *Op. cit.*
8. *Op. cit.*
9. *La Menthe et ses plantations*, Pancalieri.
10. Die *Ätherischen Öle*, 3d Ed. Vol. III, p. 850.
11. *Op. cit.*
12. *Parf. Moderne* 22 (1929), 615.
13. *Zeitschr. f. Angew. Chem.* 47 (1934), 415.
14. *Ber. d. Deut. Chem. Ges.* 70 (1937), 85.

Specific Gravity at 15°C:	0.902 to 0.926
Optical Rotation:	-2°30′ to -27° (Since 1910, not below -12°51′).
Refractive Index at 20°C:	1.462 to 1.470
Acid Value:	Up to 0.6
Content of Ester Menthol:	2.9 to 10.4%
Content of Total Menthol:	43 to 67%
Content of Menthone:	8 to 29.4%.
Solubility:	Soluble in 3 to 7 volumes of 70% alcohol; opalescent to turbid with more.

Chart No. 4

According to Carles[11], Italo-Mitcham peppermint oils show the following constants:

Density	0.906 to 0.912
Optical Rotation:	-18° to -25°
Content of Ester Menthol:	3 to 6%
Content of Total Menthol:	47 to 57%
Content of Menthone:	15 to 30%
Solubility in 70% alcohol	Soluble in 3 and more volumes.



THE Manufacturing RETAILER



CANDY PROBLEMS

By JAMES E. MAYHEW

RETAIL candy stores are facing many problems arising from a shortage of raw materials and labor. These shortages are a handicap but can be overcome by working a little harder and faster and going after every problem from every angle.

As we look around, there is no end to the good candy that can be made from the large amount of food supplies which are on the market. It is true we are short of some of our essential materials. When that is the case, we have to spread these materials out and add other ingredients to take their place. It may be necessary to change some of our formulas to fit the occasion.

With a little extra perseverance and study based on the past experience of successful candy makers, no doubt we will be fully repaid for our efforts by finding some of the solutions we are seeking.

Butter is on the short list but there are other vegetable fats and oils that can be used to good advantage if the proper method of processing and flavoring is used.

Sugar is one of the materials we could use in larger quantities but there are a number of items that can help to fill the gap for the present time such as honey, maple sugar, Sweetose, Nulomoline, malt syrup, fruit juices, jams, dextrose or corn sugar.

Milk products are also on the short list. For instance, we may have to change our formulas to meet the present shortage of fresh cream but one can make some very nice caramels or fudge with powdered milk or cream, plastic milk, evaporated, condensed or fresh milk. As we look back through the years, the candy makers of the past did a very good job with the materials they had, and somehow a number of them managed to build up successful businesses and make a reputation for themselves and the industry as well. It may have been the old-fashioned molasses candy, butter scotch or pan toffee because these goods repeated. Now would be a good time to try some of the old time candy once again.

For any information regarding new materials, it would be advisable to get in touch with the manufacturers of new products and special material that is used in the candy and food industries. They have their own experimental laboratories, practical candy makers, chemists and scientific men developing their goods so as to assure them that they are complying with all pure food laws and food requirements in every state.

The tin shortage has left us without any candy pans, but we have the marble slab and cooling tables and a few candy cutters to cut and make the toffee into blocks and squares to be sold by the pound or 5c and 10c bar. With this in view, we will be able to revive some of the forgotten candy and make some new head-line sellers, and save labor by not wrapping each piece.

Most candy makers are familiar with the pan toffee line, and have their own pet formulas that they have tried, tested and proven successful in their own location.

For the benefit of newcomers, we will submit some of the old-time formulas so that they can get the idea and develop their own formulas for their location. It is well to remember that a flavor may be very popular in one state and make no impression in another. The manufacturing retailer can help the war effort by supplying candy for service men but care must be taken to make goods that will hold up and stand the different climate changes. Hard candy, butter scotch, pan toffee and a high-cooked caramel are a few pieces that can be included. But all candy made for over-seas should be very carefully wrapped and sealed to insure safe arrival.

If you wish to build up good will in your own town, make some special candy that you can sell to the home folks for service men. They are all very anxious to send candy to their sons, brothers and friends in the service. Make up strong cartons or boxes that will hold five pounds of candy, gross weight, with the proper labels attached to simplify the problem of sending candy from your home town to the service men at the front. It is often possible to secure job lots of cartons from various sources.

Another source of supplies that it would be well to look into is the biscuit manufacturers. They have a number of items in their lines that are good eating when dipped in chocolate. The graham cracker makes a nice crisp piece and good eating when dipped or mixed with milk chocolate.

The graham crackers should be crushed or rolled over with a rolling pin and put through a sieve so as to get a uniform size. Then mix with the milk chocolate. It is a nice piece to deposit in paper cups. With a baker's icing bag, one can make some fancy shapes for topping candy boxes. Another method is to drop them the same as coconut kisses with a fork and spoon, or if you have any thin chocolate molds, you can make some 5c bars.

Cereal manufacturers have a number of items that work out very well. If you wish to make a nice crisp brittle, you can make this the same way you would make Pop Corn Crisp. Try puffed wheat or puffed rice for making the brittle. It is delicious. Certain flavor companies have developed new coconut flavors which when used in combination with proper cereal bases, gives a very satisfactory imitation shredded coconut product.

Old Time Formulas

MOLASSES TAFFY

5 lbs. granulated sugar
6 lbs. corn syrup
4 lbs. New Orleans molasses
juice of one lemon
½ lb. coconut oil or butter
1 lb. water

Mix well and cook to 250 degrees F., then add

½ lb. good butter
½ lb. honey that has been heated and cooked to 250 degrees F.

Flavor with a little vanilla; pour on cool slab and when cool, pull on hook until light; then place on candy table and pull out thin and cut in bars to sell for 5c or put on tray that has been lined with wax paper to sell by the pound.

BUTTER SCOTCH

Grate the rind of two lemons in 4 lbs. granulated sugar, then add the juice.

2 lbs. medium brown sugar
2 lbs. corn syrup
2 lbs. water
½ lb. coconut fat, mix well and cook to 260 degrees F. See that the kettle is well steamed down, then add:
1 lb. butter and one teaspoonful salt, mix and cook to 280 degrees F. Pour on oiled marble about ¼ inch thick. When cooled a little, cut in squares so as to be able to break in any desired size, and when cold, wrap in waxed paper.

PAN TOFFEE

3 lbs. granulated sugar
½ teaspoonful Cream of Tartar mixed in ½ cup water
1 lb. light brown sugar
1 lb. fresh milk
1 lb. evaporated milk
½ teaspoonful salt
1 lb. corn syrup
¼ lb. coconut oil or fat
¾ lb. butter. Mix well and cook to 260 degrees F. Flavor with vanilla or rum flavor, pour on cool slab ½ inch thick and when cooled a little, cut halfway through and mark in squares so as to make 5c or 10c bars, or pour in sheet form to be sold by the pound.

A. R. C. Conference Program

The 2nd A. R. C. War Time Conference will be opened on Sunday evening, June 4th, with the House of Friendship. A. Klein & Co. will be host at the Flowing Bowl. No morning sessions are planned. June 5th will be devoted to post-war planning and a production quiz program. Mr. Seymour Neill of Mrs. Snyders Candies is the able quiz master. The "quiz kids" will be announced later. A resume of the Southern Regional Laboratories of the U. S. D. A. work being done on the use of new ingredients in candy and an engineering lay-out for candy plants are being planned. On June 6th, it is expected to have short presentations of problems by A. R. C. members. June 7th will usher in the first candy industry drama ever presented by the A. R. C. The motive for the conference is clever; "Tricks that Clicked for you."



Man Wants But Little Here Below!

Do you know of any of the candy or gum manufacturers that would ship us some candy or gum? We need both, and they are very scarce in this section. We can give reference or supplier can ship b/l attached.

—Georgia

Reply: All together, now, you manufacturers, drop us a line and give us some help on this.

Chocolate Analysis

In reviewing the analytical procedures for the estimation of bitter liquor or cacao matter in chocolate products, such as sweet and milk chocolate, we find reference to the "water insoluble material" as the basis for calculation of this ingredient. Reference is made to this in THE MANUFACTURING CONFECTIONER, *November 1937 in the article by Jordan and Langwill on the "Reconstruction of Candy Formula from Analytical Data;" also in books entitled "Chocolate Evaluation" by Jordan & Langwill and "Cocoa and Chocolate. Their Chemistry and Manufacture" by R. Whymper. We have not been able to find a procedure for its determination.*

—New York

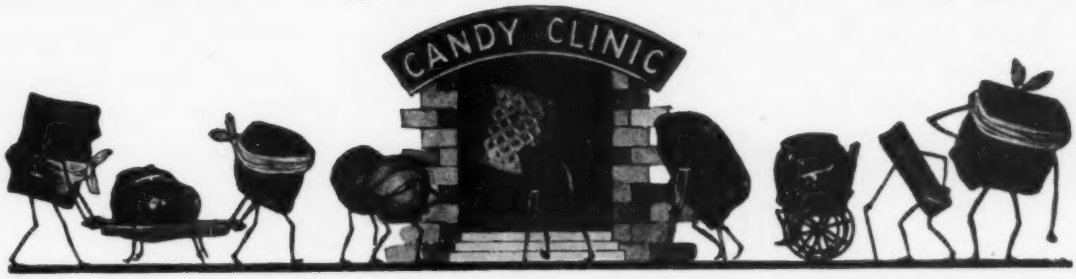
Reply: Dr. Jordan has kindly supplied the following detailed procedure for the determination of water insoluble material in chocolate: "5 grams of chocolate, extracted with ether, centrifuged, washed three times with ether, ether in residue driven off. This residue is stirred up with 35 ml. of cold water (room temperature), allowed to stand over night at room temperature, then stirred, then centrifuged, washed three times with water, and the residue in the centrifuge tube is dried and weighed.

Jawbreakers

I am very much interested in finding out if anyone is still making a hard candy called "jawbreaker" which was popular about 30 years ago. It was about an inch long, ¾ of an inch wide and ¾ of an inch thick, and was coated with sugar, giving it the appearance of an oblong gum drop but having a very hard center.

—Virginia

Reply: As far as we know, the item you described is no longer manufactured. Today the item is round in shape and about one inch in diameter and has a series of colors running through the piece. We fear that the present day item will not take the place of the old style "jawbreakers." The old style "jawbreaker" was in a class by itself; one could start it at 7:00 o'clock in the morning and still be going at it at 7:00 o'clock in the evening.



THE INDUSTRY'S CANDY CLINIC

HELD MONTHLY BY THE MANUFACTURING CONFECTIONER

The Candy Clinic is conducted by one of the most experienced superintendents in the candy industry. Some samples represent a bona-fide purchase in the retail market. Other samples have been submitted by manufacturers desiring this impartial criticism of their candies, thus availing themselves of this valuable service to our subscribers. Any one of these samples may be yours. This series of frank criticisms on well-known branded candies, together with the practical "prescriptions" of our clinical expert, are exclusive features of THE MANUFACTURING CONFECTIONER.

Assorted One Pound Boxes of Chocolates

(Continued from March)

CODE 2M44

Marshmallow Caramel Bar —1¼ ozs.—5c

(Purchased in a railroad depot, New York City)

Wrapper: Glassine, printed in red, yellow and brown.
Coating: Light: of the cheapest kind.
Center: Marshmallow: very hard.
Caramel: Of the cheapest kind.
Remarks: This is without a doubt the cheapest bar of its kind that the Clinic has examined in years.

CODE 2N44

Chocolate Covered Cereal Bar —1 oz.—5c

(Purchased in a railroad depot, New York City)

Wrapper: Glassine, printed in yellow, green and pink.
Coating: Dark: Fair.
Center:
Color: Good.
Texture: Very tough.
Taste: Fair.
Remarks: Suggest center be changed as it is entirely too hard.

CODE 2U44

Chocolate Covered Yeast Bar —⅞ ozs.—5c

(Purchased in a railroad depot, New York City)

Wrapper: Wax paper, printed paper band in red, yellow and blue.
Coating: Fair.
Center: Color: Fair.
Texture: Good.
Taste: Fair.
Remarks: This is not a good eating bar of candy. Unless the consumer is looking for this type of bar, I doubt that he would eat it.

CODE 3J44

Assorted Chocolates—1 lb.—50c

(Purchased in a 5c & 10c Store, New York, N. Y.)

Appearance of Box: Good.
Box: Two layer, full telescope, white embossed in gold, red, blue panel, seal on ends with cellulose tape in center.
Appearance of Box on Opening: Good.
Coatings: Light and Dark.
Colors: Good.
Gloss: Good.
Strings: Fair.
Taste: Good.
Number of Pieces: 5 light coated, 29 dark coated.
Light Coated Centers:
Chocolate Cream: Good.
Raisin Clusters: Good.
Vanilla Caramel: Good.
Dark Coated Centers:
Chip: Good.
Chocolate Filled Hard Candy Stick: Good.
Maple Cream: Flavor too strong.
Nut Nougat: Good.
White Cream: Could not identify flavor.
Chocolate Nut Caramel: Had a very strong taste.
Pink Cream: Could not identify flavor.
Short Nougat and Peanuts: Good.
Faint Yellow Colored Cream: Could not identify flavor.
Fruit Blossom: Had a burnt taste.
Dark Taffy: Fair.
Almonds: Good.
Assortment: Fair.
Remarks: Assortment contained too many creams. Flavors are not up to standard used in other 50c and 60c assorted chocolates.

CODE 3L44

Assorted Chocolates—1 lb.—70c

(Purchased in a drug store, Boston, Mass.)

Appearance of Package: Good.
Box: Two layer, extension type, blue center of white embossed gold name in blue.
Appearance of Box on Opening: Good.
Number of Pieces: 33 dark coated, 11 light coated.
Coatings: Dark and Light.
Colors: Good.
Gloss: Good.
Strings: Good.
Taste: Good for this priced chocolates.
Dark Coated Centers:
Chewy Taffy: Fair.
Chocolate Fudge: Fair.
Butterscotch: Lacked butter flavor.
Chocolate and Vanilla Cream: Good.
Wintergreen Cream: Good.
Caramallow: Good.
Dark Cream: Could not identify flavor.
Cherry Cream: Flavor too strong.
Orange Cream: Flavor: Good. Cream: Dry.
Plantation: Lacked flavor.
Vanilla Cream: Dry.
Vanilla Nut Caramel: Good.
Cordial Cherry: Good.

Candy Manufacturers,
Candy Industry Suppliers,
Candy Brokers,
Candy Jobbers,
Candy Retailers,
Candy Salesmen –

Do you know what your business will be facing after the war? . . . .

TODAY we have a sellers' market on candy—but **what about tomorrow?**

Have you considered what is likely to happen after the war? Here is what we could have—

A surplus production of candy
Narrowing markets
The return of destructive competition

That is the handwriting on the wall unless we, who live by candy, do something about it now.

* * *

How are we going to protect the stake we all have in a healthier and bigger market after the war?

Candy has not kept pace with other food products in developing normal markets.

The total of advertising efforts to promote candy has fallen far behind those of other products fighting for a place in the American stomach.

* * *

Are you aware of what has been going on behind the scenes?

A nationwide survey among consumer and professional groups reveals what this five hundred million dollar industry is now called upon to face.

We believe it is time to look at the facts.

For one thing, candy has been under attack in certain influential quarters which help to shape public opinion.

The findings of our nationwide survey reveal that candy is enjoyed by millions.

But these findings also reveal widely-held beliefs among both consumers and professional groups which constitute a serious threat to the candy industry.

The evidence indicates we are facing trends which could undermine the future of our business—a business essentially related to the prosperity of American farmers, the employment of American labor, the functioning of American food distribution.

* * *

That's why we've decided to do something about it.

We must get over to the public, the professional groups, the teachers and the trade a new concept of candy—a concept based on facts about its food value, its wholesome appeal to the taste, its place in the pattern of American life. **The time to start is now.**

This is a big job for all of us. It must be undertaken with a deep sense of responsibility.

It must have back of it the driving force of a united candy craft—manufacturers, suppliers, brokers, jobbers, retailers and salesmen.

Mobilization

Meetings are to be held shortly at strategic centers throughout the country to launch a long-range program for the advancement of candy as a food.

If you are engaged in the manufacture or distribution of candy, or supply materials or equipment to the industry, you can learn firsthand, at your original meeting, just what your business is facing and what the Council on Candy plans to do about it.

In your own interest, plan to attend. Write now for information on meeting date in your area. Address Council on Candy, National Confectioners' Association, One North LaSalle Street, Chicago 2, Illinois.

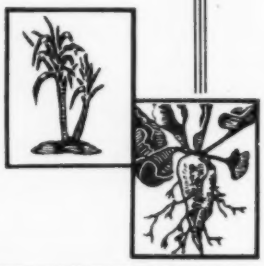
COUNCIL ON CANDY
of the
NATIONAL CONFECTIONERS' ASSOCIATION

THEO. STEMPFEL, Chairman, E. J. Brach & Sons, Chicago

W. C. DICKMEYER, Wayne Candies, Inc., Fort Wayne, Ind.
HERMAN L. HEIDE, Henry Heide, Inc., New York, N. Y.
J. H. REDDY, New England Confectionery Co., Cambridge, Mass.
BERNARD D. RUBIN, Sweets Co. of America, Inc., Hoboken, N. J.
OTTO SCHNERING, Curtiss Candy Company, Chicago
A. L. STANG, The Cracker Jack Company, Chicago
PHILIP P. GOTT, President National Confectioners' Association
PAUL R. TRENT, Schutter Candy Company, Chicago
O. G. TRUDEAU, Trudeau Candies, Inc., St. Paul, Minn.
GEO. H. WILLIAMSON, Williamson Candy Co., Chicago

Advertise Your Products

If your production and distribution are limited by your sugar supplies, supplement them by non-rationed syrups. Increased production and sales are your best advertisement. For non-rationed syrups, call



B. W. DYER & COMPANY

Sugar Economists & Brokers

120 Wall Street, New York 5, N. Y., Phone: WH 4-8800
Cable: DYEREYD, N. Y.

Fruit Cream: Not a good flavor.
Vanilla Caramel: Tough.
Dark Marshmallow: Could not identify flavor.
Raspberry Cream: Imitation flavor.
Fig Jelly: Fair.
Nut Cream: Dry.
Raisin Cream: Good.
Fudge and Marshmallow: Fudge: Hard, white cream: No flavor.

Light Coated Centers:
Butterscotch: Lacked butter flavor.
Taffy: Tough.
Chocolate Nut Fudge: Good.
Almonds: Good.
Vanilla Nut Cream: Cream: dry.
Fruit Nougat: Good.
Sponge: Good.

Assortment: Good.

Remarks: Suggest that flavors be checked up, also some of the creams were dry. The caramels and chewy pieces are very tough and stick to the teeth, suggest more butter be used. Butterscotch is cooked too high.

CODE 3O44

Assorted Chocolates—1 lb.—69c

(Purchased in a drug store, Boston, Mass.)

Appearance of Package: Good.
Box: Two layer, full telescope type, white embossed paper printed in blue and gold. Printed blue ribbon and bow, seal on ends with cellulose tape.
Appearance of Box on Opening: Good.
Number of Pieces: 39.
Coating: Dark.
Color: Good.
Gloss: Good.
Strings: Good.
Taste: Good, for this priced chocolates.

Dark Coated Centers:
Butterscotch: Lacked flavor, stuck to the teeth.
Raisin and Nut Nougat: Good.
Raspberry Cream: Fair.
Hard Candy Stick: Flavor too strong.
Vanilla Cream: Fair.
Nut Brittle: Good.
Dark Cream: Could not identify flavor.
Jelly: Good.
Pistachio and Chocolate Cream: Pistachio flavor too strong.
Peppermint Cream: Fair.
Walnut Half:: Good.
Cashew: Good.
Vanilla Caramel: Good.
Chocolate Caramel: Lacked chocolate flavor.
Cream: Could not identify flavor.
Orange Cream: Flavor had an off taste.
Sponge: Good.

Assortment: Good.

Remarks: Suggest cream centers be checked up as they are not up to standard. Some were tough and some looked as if too much corn syrup was used.

Most of the flavors were better than we find in 70c boxes of assorted chocolates.

In a few pieces the flavors were entirely too strong, an over-flavored cream is not good eating. Suggest a little lemon, lime or orange oil be used in the jellies as they lacked flavor.

CODE 3P44

Chocolate Pecan Delights—1 lb.—$1.50

(Purchased in a Department Store, Chicago, Ill.)

Appearance of Package: Good.
Box: One layer type, buff color, name brown, tied with green grass ribbon, Valentine paper band printed blue and red.
Appearance of Box on Opening: See Remarks.
Piece is a chocolate cream pecan kiss.
Color: Fair.
Texture: Dry and Tough.
Taste: Fair.



CLOVE OIL

Clove oil finds its biggest use in hard candy. It is also good for clove mints, and used in chewing gum sometimes as a blend with cinnamic aldehyde. It may be used in chocolate coatings to develop a distinctive flavor.

At Lueders' we make our own distillation of clove oil, U.S.P. XII G. L. from (Zanzibar) buds. We invite you to consider our clove oil as a flavor improvement to your candy line.

Established 1885

George Lueders & Co.

427-29 Washington Street
New York 13

CHICAGO 510 N. Dearborn Street
SAN FRANCISCO 56 Main Street
MONTREAL, CANADA, 361 Place Royale
Repr. in Philadelphia and St. Louis

Remarks: Suggest these kisses be checked up as they were not good eating, very tough and lacked a good chocolate flavor.

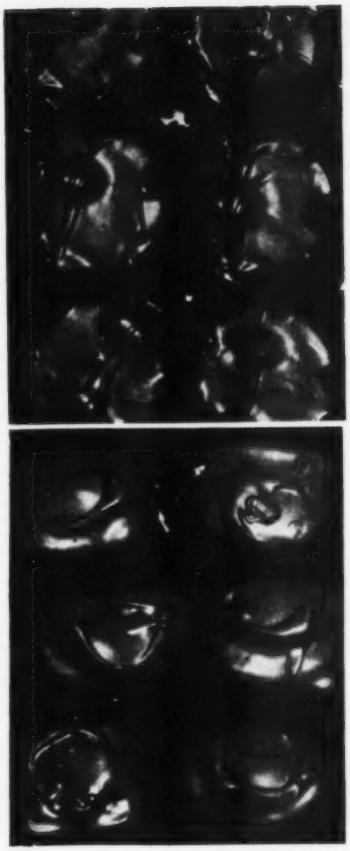
On opening box, kisses were discolored and did not look good enough to eat. If these kisses are to to shipped, we suggest that each piece be wrapped in moisture-proof cellulose wrapper.

CODE 3Q44

Assorted Chocolates—1 lb.—45c

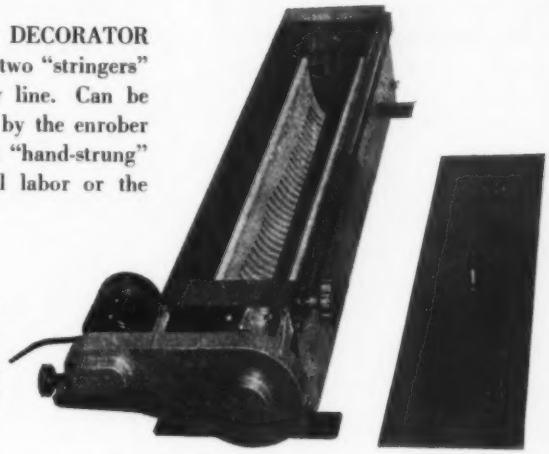
(Sent in for Analysis No. 4417)

Appearance of Package: Good.
Box: One layer, telescope type, buff embossed paper top, name in red in brown block.
Appearance of Box on Opening: Very poor. See Remarks.
Number of Pieces: 65. See Remarks.



HOW TO SOLVE THE HELP PROBLEM

LATINI CHOCOLATE DECORATOR easily takes the place of two "stringers" on the enrober delivery line. Can be operated and controlled by the enrober operator and produces "hand-strung" effect without additional labor or the touch of human hands.



Patented

U. S. Patent No. 2,338,349 covers the equipment here illustrated. At the left are examples of the work it performs. Many other designs possible without complicated adjustments.

LATINI CHOCOLATE DECORATOR makes routine work of stringing, roughing and decorating of machine-coated chocolates. It is simply constructed and combines low initial cost with efficient operation and long life. Easy to adjust to delivery belt speed and for decorative design changes. Many of these decorators now in operation all over the U. S.

Eastern Representative
JOHN SHEFFMAN
152 W. 42nd St. : New York

CHOCOLATE SPRAYING COMPANY

2027 West Grand Ave. **CHICAGO, ILLINOIS**

FIRST CHOICE

FOR FINER JELLY CANDIES
EXCHANGE CITRUS PECTIN



FIRST CHOICE FOR QUALITY: Jelly candies made with EXCHANGE Citrus Pectin are famous for their eating quality —freshness, flavor, and brilliant clarity—whether made cast or slab.

Feature them in all your packs and assortments.

They have a superior quality your customers recognize.

The boys in our armed forces are eager for those tangy, fruit flavored Pectin Candies too.

FIRST CHOICE FOR PROFITS: EXCHANGE Citrus Pectin Candy cuts production time—sets and is ready for "sanding" in a few hours—packs easily in bulk. With EXCHANGE perfected formulas, you can be sure of a good batch—and good profits.

Confectioners everywhere are featuring Jelly Candy made with EXCHANGE Citrus Pectin. It's a proven way to step up sales and increase profits. Try it!

Exchange
CITRUS
PECTIN

CALIFORNIA FRUIT GROWERS EXCHANGE
Products Department, Ontario, California
189 W. MADISON ST., CHICAGO ★ 99 HUDSON ST., NEW YORK

Copyright, 1943, California Fruit Growers Exchange, Products Department

CRUSHED ORANGES
Cut and Ready for Dipping

The entire fruit, pulp and juice concentrated. Perfect for chocolate and bon bon centers.

We originated this.

Also packed in barrels for cream work and other orange candies.

CHAS. C. WALKER
TROPICAL FRUIT CONFECTIONS
Groveland Florida

CANDY TIED WITH
RIBBONS —— Means More Sales
We have largest stock in the Middle West

Satin—Messaline—Patriotic & Novelty Ribbons—Rib-O-Nit—Ready-Made Bows—and Rosettes.

R. C. TAFT CO.
429 W. RANDOLPH ST. CHICAGO

RIBBONS *by* TAFFEL



Ribbons dress up the candy box . . . Carry out YOUR ideas with TAFFEL RIBBONS and you'll increase sales. Samples and prices on request. Send for free instructive booklet.

TAFFEL BROS., INC.
95 Madison Ave. New York, N. Y.

FLAVORS BY DREYER
ESSENTIAL OILS
For a really fine Cherry Wild flavor try our
CONCENTRATED IMITATION
CHERRY WILD
FOR HARD CANDY
$8.00 Gal.
Use 1½ oz. to 100 lb. batch candy
Samples on Request
FLAVOR BASES
P.R. DREYER INC.
119 WEST 19th ST., NEW YORK, N.Y.

Coating: Dark.
Color: Too dark.
Gloss: Fair.
Strings: None.
Dipping: Very poor, most all pieces had a machine move on them.
Taste: Fair.
Centers:
Lemon Cream Wafers: Fair.
Orange Cream Wafers: Fair.
Fruit Chips: Imitation flavor, too much acid.
Raspberry Cream: Imitation flavor.
Vanilla Cream: Fair.
Maple Cream: Fair.
Assortment: Entirely too small.
Remarks: We suggest that this company get a copy of the Candy Order from the War Production Board in regard to the number of pieces to the pound other than fruits and nuts which is 60 pieces not 65 pieces to the pound.

Cream centers are very poorly made. Flavors are not up to standard. The hard candy fruit pieces are not good eating.

Box is too large and chocolates are very cheap looking.

This box of chocolates is in the 39c class. We have examined better chocolates at 39c the pound.

CODE 3R44

Assorted Chocolates—1 lb.—$1.29

(Sent in for Analysis No. 4418)

Appearance of Package: Good.
Box: Round paper board top, has an over all print in brown and red, name in center in red.
Appearance of Box on Opening: Good.
Number of Pieces: 64 chocolates, 6 Jordan Almonds.
Coating: Dark.
Color: Good.
Gloss: Good.
Strings: Good, but plain.
Taste: Good.
Centers:
Chocolate paste: Good.
Fig paste: Good.
Cordial Cherry: Good.
Fruit paste: Too much acid used.
Chocolate paste: Could not identify flavor.
Coffee Chocolate paste: Good.
Almond paste: Good.
Coffee Cream: Good.
Yellow cream centers: Had a rank, rancid flavor.
Orange colored almond paste: Had a rank, rancid flavor.
Red Almond paste: Fair, too much color used.
White Jelly: Rank flavor.
Red Cream: Very poor, could not identify flavor.
Jordan Almonds: Fair flavor.
Nut Glace: Good.
Vanilla Nut Caramel: Good.
Nut Nougat: Good.
Peanut Cluster: Good.
Almonds: Not roasted enough.
Chocolate Caramel: Good.
Pink Jelly: Could not taste any flavor.
Remarks: Too many chocolate paste pieces, also too many of the almond paste pieces. Almond paste did not taste like true almond paste.

Cream centers need checking up and the flavors used are not of good quality.

Assortment needs more nut centers, hard candy centers less jelly centers.

We have examined far better chocolates at $1.10 the pound. These chocolates may sell now but after the war, we doubt if they would sell at 70c the pound.

CODE 3N44

Assorted Chocolates—1 lb.—70c

(Purchased in a railroad depot, Boston, Mass.)

Appearance of Package: Good.
Box: Two layer, extension type red and white, name embossed in gold, also gold embossed ribbon and bow.
Appearance of Box on Opening: Bad—See Remarks.
Number of Pieces: 35 dark coated, 9 light coated.
Coating: Dark and Light.
Colors: Good.
Gloss: Good on light coated pieces, most all of the dark coated were badly bloomed.
Strings: Good.
Taste: Good, for this priced chocolates.
Dark Coated Centers:
Fig Jelly: Fair.
Dark Cream: Could not identify flavor.
Raisin Cream: Good.
Wintergreen Cream: Too much color used.
Maple Walnut Cream: Fair.
Vanilla Caramel: Tough.
Caramallow: Good.
White Cream: Lacked flavor.
Butterscotch: Too hard and lacked a butter flavor.
Cherry Cream: Flavor too strong
Dark Marshmallow: Could not identify flavor.
Orange Cream: Fair.
Chew: Lacked flavor.
Vanilla Nut Caramel: Too hard.
Vanilla Cream: Good.
Nut Chewy Taffy: Tough.
Vanilla and Chocolate Cream: Good.
Cordial Cherry: Good.
Chocolate Fudge: Good.
Light Coated Centers:
Peanut Clusters: Good.
Almonds: Good.
Fruit and Nut Nougats: Good.
Nut Taffy: Tough and hard.
Chocolate Fudge: Good.
Chew: Had a scrap taste.
Nut Cream: Cream dry.
Assortment: Good.
Remarks: Top layer had a number of badly bloomed pieces. Suggest more fats or butter be used in the caramels and chewy pieces as they were tough and some were cooked too high. Cream centers need checking up as a number of them were dry, some were hard. Also suggest some of the flavors be checked up as they were not up to standard.

AN
ALL AROUND
SERVICE TO
CONFECTIONERS
SINCE 1885



Favorite Brand

NUTCORETTES

An ideal substitute for almonds in dipping and panning. Their tempting flavor and economy mean increased volume and profit for you. Available in large, medium and small sizes, both natural and toasted.

Favorite Brand

FLAVORING SPRINKLES

An excellent product for topping your candies and cookies. Assorted colors. Packed in barrels.

Favorite Brand Chocolate

NUTCORETTE PASTE

An Excellent Candy Center.

Samples on Request

WOOD & SELICK, Inc.

36 Hudson St. New York 13, N. Y.

Branches: Chicago, Baltimore

Quality

confectioners starches

Service

confectioners crystal 3 star corn syrup

Uniformity

cerelose . . . dextrose sugar

CORN PRODUCTS SALES CO.

17 BATTERY PLACE, NEW YORK 4, N. Y.



STANDARD Synthetics

MIRROR NATURE PERFECTLY

For true and delicious flavors, go to Standard Synthetics. All Natural Essential Oils and Aromatics in stock. Delicious Flavors for Hard Candies and Chocolates

Raspberry	**Chocolate**
Strawberry	**Wild Cherry**
Pineapple	**Vanilla**
Grape	**Peach**
Orange	**Cocoanut**
Lemon	**Lime**
Anise	**Ginger**

Write for our catalogue of complete line.

STANDARD Synthetics, INC.

30 West 26th Street New York 10, N. Y.

Branches in:

Chicago, Kansas City, Mo., San Francisco.

CONFECTIONERS' BRIEFS

Mason, Au & Magenheimer Confectionery Mfg. Co., Brooklyn, is pushing its newest confection, Vita-Snak in a series of one column test ads in four eastern cities . . . **Saf-T-Pop Corp.**, patentees of the Safety Looped Handle Sucker and machines for making same, have moved into new quarters at 5906 N. Western Ave., Chicago. New ideas and developments combined with increased business of two franchised accounts, **Reed Candy Company** and **Curtiss Candy Co.** has made the move necessary . . . **Gum, Incorporated,** announces the change of its name to **Bowman Gum, Inc.** This involves no change in the management or operations of the corporation. . . . **Sierra Candy Co.**, San Francisco, have increased their coverage to include Nevada. "Songs of Freedom" is broadcast in California, Oregon and Nevada. The program is tied to aiding the war effort. . . . **The Oswego Candy Works,** Oswego, N. Y., has been cited for honorable mention by the Safety Division of the Syracuse Chamber of Commerce for its safety record for the last quarter of 1943. . . . E. A. Obern has been appointed sales manager of the new grocery division of the **Sweets Co. of America,** Hoboken. . . . **General Candy Co.** reports net income of $173,294 for 1943. . . . **The Ohio Confection Co.**, Cleveland, has been authorized by OPA to price certain candy specialties including "Pecan Divinity Loaf," packed 7½ pounds net in cardboard boxes at a maximum price of 32c per pound f.o.b. Cleveland less 2% for cash in 15 days on sales to chain and syndicate stores. . . . Dr. I. Q. the Mental Banker radio program will be again sponsored by **Mars, Inc.** starting on April 3rd, and continuing every Monday thereafter. . . . **Topp Chewing Gum Co.**, Brooklyn, have moved general offices from 60 to 134 Broadway, Brooklyn. . . . **The Chicago Candy Club** held its March meeting on March 13th. The current Red Cross drive held the spotlight for the evening. Part of the proceeds of the Bond Rally of last June was contributed to the Red Cross. . . . George Volk, Chicago representative of the **Hollywood Candy Co.** sold $85,000 worth of bonds in the recent War Loan Drive. In less than a year, Mr. Volk has sold $189,000 worth of bonds! . . . Twelve prominent members of the **S. W. C. A.** have been selected by the United States Chamber of Commerce for membership on its important "Committee on National Affairs." The men selected are: W. H. Striplin, Birmingham, Ala.; F. J. Isenman of A. Karcher Candy Co., Little Rock, Ark.; J. M. Turner of Turner-Taylor Co., Tampa, Florida; J. R. Whitaker of Whitaker and Garrett, Gainsville, Georgia; Victor Frank of George Frank and Sons, Louisville, Ky.; J. J. Reiss of James J. Reiss Co., New Orleans, La.; R. A. Cochran of E. R. Cochran Co., Jackson, Miss.; J. R Shannon of Acme Candy Co., Wilson, N. Car.; C. B. Poole, Gaffney, S. Car.; H. A. Tiller of H. A. T. Food Products Co., Knoxville, Tenn.; C. A. Fitzgerald of Del-Tex Nut Co., San Angelo, Texas; and C. C. Johnson of the Southside Candy Co., Petersburg, Va.

Brooks Heads Thinshell

Mr. E. W. Brooks was elected Vice-President of Thinshell Candies, Inc., Chicago, at the annual meeting on March 28th.



Sweetose*

REG. U.S. PAT. OFF.

The ALL PURPOSE SWEETENER *with a Future!*

★

TWICE as SWEET • THRICE as FLUID AS ORDINARY CORN SYRUP

TO cut production costs without sacrifice of quality will be more important than ever in the keenly competitive post-Victory era. As you plan tomorrow's formulas, please remember these "SWEETOSE" advantages: Cuts cost of ingredients because of its unequaled ability to replace other sweeteners . . . Permits faster cooking and faster whips . . . Handles easier in storage tanks, pipelines and kettles . . . Improves product taste and actually accents other flavors . . . Extends the shelf life of candies and confections. Here are vital, money-saving, profit-building advantages—all in *one* all-purpose sweetener—Staley's "SWEETOSE", the sweetener with a future. And increased peacetime production will mean more "SWEETOSE." Then today's margin between supply and demand will reverse and the supply will be ample.

* "SWEETOSE" Reg. Trade Mark for Staley's Enzyme Converted Corn Syrup

A. E. STALEY MANUFACTURING COMPANY

Staley's CORN AND SOY BEAN PRODUCTS

DECATUR ILLINOIS

Butterscotch



LINGERING • DELICIOUS

Grand for Caramels

Your first order for FRUTAL Imitation Butterscotch Flavor will be followed by others as you become acquainted with the excellence of this product.

★

★ ★

POLAK'S Frutal WORKS INC

36-14 35th St. — LONG ISLAND CITY, N. Y.

CHICAGO, LOS ANGELES, SAN FRANCISCO, ST. LOUIS

WHEN THE *Finest* IS THE FIRST CONSIDERATION



Her taste demands Ambrosia

This *Marine* knows what he wants — and so does SHE! Notice how she hangs on to that box of fine chocolates? She responds to the 50-year-old flavor wallop in Ambrosia COATINGS that has helped fine candy makers achieve flavor leadership — coast to coast.

Ambrosia CHOCOLATE COATINGS
MADE IN MILWAUKEE

Aromanilla

will produce that soft, ***full*** volume of flavor appeal in your finished product. It is a flavor that will ripen and develop in your confectionery goods while on the shelf.—**A flavor that will create a re-order demand from your customer.**

Order Today Under A *Satisfaction Guarantee.*

Made From Mexican Vanilla Bean Base

SINCE 1901
Aromanilla
TRADE-MARK REG. U.S. PAT. OFF.
6 VARICK STREET, NEW YORK 13, N. Y.

Stevens Candies Appoints Ad Manager

Stevens Candy Kitchens, Inc., Chicago, announce the appointment of Miss Alida Linnaus as advertising manager effective April 3rd. Miss Linnaus has had wide experience in the advertising and publicity fields.

Wrigley Ousts Self

P. K. Wrigley resigned from the presidency of Wm. Wrigley Jr., Co., to become the company's largest stockholding director. Mr. J. C. Cox is the new president. As a director, Mr. Wrigley will be able to devote more time to the study of operation and distribution problems imposed by the war.

Credit Women Elect Officers

Miss Antoinette Rehrauer, Peerless Confection Co., Chicago, is the new president and Mrs. Bertha Blinks, Steven's Candy Kitchens, Inc., Chicago, is the new corresponding secretary of the Credit Women's Club of Chicago.

Lewis Waters Dies

Lewis W. Waters, vice-president in charge of scientific research and development for General Foods died March 31st in New York. Mr. Waters was associated with General Foods for 16 years.

A Correction

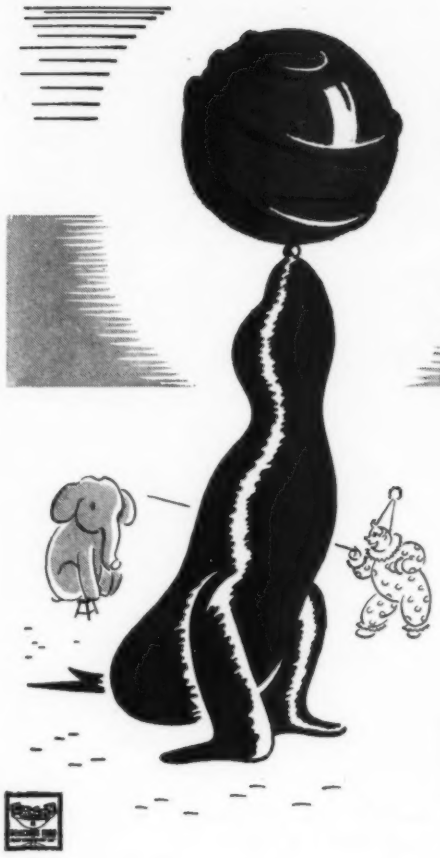
The following heading appeared on a news item in the March issue of THE MANUFACTURING CONFECTIONER: "Latini Chocolate Sprayer Patented." The heading should have read: "Latini Chocolate Decorator Patented."

General Mills, Inc. announce priorities have been secured for the complete installation of their new soybean processing plant, at Belmond, Iowa. Operation is expected to start early this summer.



The Seal of
QUALITY PRODUCTS
AND SERVICE

ROSS & ROWE INC.
75 VARICK STREET — WRIGLEY BLDG.
NEW YORK N.Y. — CHICAGO, ILL.
SOLE SELLING AGENTS FOR
AMERICAN LECITHIN COMPANY



BALANCE

Chocolate, too, must be in proper balance so that the fine, true flavor of the cocoa beans is not overcome by too much sweetness. In Merckens Chocolate Coatings these qualities are in perfect proportions.

MERCKENS CHOCOLATE CO. INC.
Seventh and Jersey Streets, Buffalo, New York

Branches and Agencies: New York, Boston, Los Angeles; Handler & Merckens, Inc.; Chicago, Illinois; W. H. Bintz Co., Salt Lake City, Utah; Western Bakers Supply Co., Denver, Colorado

---



HELPS to quality control

HERE are four food ingredients in which you can be certain of uniform, high quality—even in these hectic days.

Despite wartime pressure for more and more production, *every* batch of each of these four Monsanto flavors is rigidly controlled at *every* step in their manufacture. *Every* batch is then double checked by skilled and highly trained analytical chemists in our control laboratories before it leaves for your plant. Add to those safeguards, the fact that each of these four Monsanto flavors is made largely from raw materials produced within Monsanto's own plants under equally strict controls . . . and you can see why Monsanto flavors are known throughout the food industry for *uniform* high quality. MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, St. Louis, Missouri. District Offices: New York, Chicago, Boston, Detroit, Charlotte, Birmingham, Los Angeles, San Francisco, Montreal, Toronto.

MONSANTO CHEMICALS
SERVING INDUSTRY . . . WHICH SERVES MANKIND

"E" FOR EXCELLENCE . . . the Army-Navy "E" burgee with two stars, "representing recognition by the Army and the Navy of especially meritorious production of war materials" over a two year period, flies over Monsanto.

SERVING INDUSTRY . . . WHICH SERVES MANKIND

schimmel

strawberry

You have a fine selection of strawberry flavors for candies to choose from in the Schimmel line:

FORTAROMS—Strawberry natural fruit base fortified. An economical flavor, 2 oz. per 100 lbs. in hard candy.

KALLISTAROMS—Strawberry N2301 has low evaporation loss. Use ¼ to ½ oz. per 100 lbs.

Schimmel & Co., Inc.

Manufacturers of Flavors and Basic Flavoring Materials for the Confectionery, Food, and Allied Industries.

601 West 26th Street, New York 1, N. Y.

SAVE TIME

... with ELECTRONIC CONTROLS

In the high-speeds of the future, Electronics, will be widely used to increase accuracy and cut costs.

Consult with engineers thoroughly familiar with electronic methods.

Research-Design-Construction-Development.

F. R. SCHMITT & SON

31-49 TWELFTH ST. LONG ISLAND CITY, N. Y.

SUPPLY FIELD NEWS

American Maize Appoints Melick



James B. Melick

The appointment of James B. Melick as General Sales Manager of the American Maize-Products Company was announced this week by L. G. Preston, Vice President in charge of Sales for the Company. Said Mr. Preston:

"Melick comes to the company with a broad experience in sales and advertising over the past 18 years. Melick has been, during this period, successively Vice President of Holeproof Hosiery Co., Milwaukee; General Sales Manager of Hiram Walker, Inc., Detroit; and Vice President of Seagram Distillers Corporation, New York."

Aromanilla Publishes Booklet

The Aromanilla Company has published a very interesting booklet, "The Little Pod of Mexico," which should prove of value to all candy people interested in flavors, particularly vanilla.

A. E. Staley Mfg. Co., Decatur, Ill., has recently completed a new production unit devoted entirely to making soy flour. This new soy flour plant was put up as part of the W. F. A. program which is aiming to expand the national production capacity for edible soy products to 1,500,000,000 pounds. The new Staley building is so built and equipped that it can produce, approximately, one-third of that soy flour quota each year.

. . . **Robert Gair Co., Inc.** stockholders were told that the declining trend in the supply of waste paper has been arrested in recent weeks but that the current supply available continues below the demand.

Wm. J. Stange Co., Chicago, announce the appointment of E. J. Marum as Sales Manager, effective as of March 1. Mr. Marum has been associated with The Visking Corp. of Chicago the past 14 years.

IF YOU WANT A

REAL COFFEE FLAVOR . . .

IN YOUR CANDY

Try LURIENT Pure Coffee Concentrate. Delicious . . . economical . . . always fresh . . . Lurient is the ideal concentrate for your Coffee Products.

Lurient
TRADE MARK
COFFEE
PURE LIQUID CONCENTRATE

Prices and further information on request. Or order direct from your jobber.

LURIENT COFFEE CO.,
218 State St., Boston, Mass.



★

HOOTON
DEPENDABLE
CHOCOLATE

HOOTON CHOCOLATE CO.
NEWARK, N. J. · ESTABLISHED 1897

Order Your
CUT GEARS
CUT RACKS
CUT SPROCKETS
from
"Industrial"



We are gear and sprocket cutting specialists . . . that's why we can serve you better. One product—plus undivided responsibility—equals utmost satisfaction. Send us your next order and note the difference.

Spur, Bevel, Mitre, Worm, Spiral, Internal, Helical Gears—any quantity—any material

GENERATED TOOTH RACKS
SPROCKETS FOR ROLLER OR SILENT CHAIN
PRECISION SURFACE GRINDING

INDUSTRIAL GEAR MFG. CO.
4531 VAN BUREN STREET CHICAGO 24, ILLINOIS

CEREALS IN CANDY

Increases its "FOOD VALUE"

POPPED WHEAT — Corn Flakes, Bran Flakes, Crisp Rice ★ Wheat Flakes, Toppings, Coatings, Cocoanut Substitutes — POPPED RICE

Popcorn Manufacturers Are Invited to Try Our Popped Wheat

Write Today For Samples & Prices

VAN BRODE MILLING CO.

CLINTON MASSACHUSETTS

PURE and FRESH COFFEE FLAVORING

Assure the freshness and purity of your coffee products by using Barrington Hall Instant Soluble Coffee. The rancid oils which stale coffee and, in turn, stale the product they enter, have been removed! Write for full particulars.

BAKER IMPORTING CO.

NEW YORK 132 FRONT ST. MINNEAPOLIS 212 N. SECOND ST.

INSTANTLY PREPARED

BARRINGTON HALL QUALITY Coffee 100% pure



CURTISS CANDY COMPANY Producers of Fine Foods CHICAGO, ILL.

Mutual Paper Box Gives Party

The Mutual Paper Box Corp., Chicago, celebrated Anton Mueller's 72nd birthday and the completion of 25 years of service with the corporation, 100 employees and 175 guests attended the party. A few of the confectionery people celebrating on Feb. 24th were Mrs. Julia Krafft, Miss Blinks, Mr. and Mrs. Sayer, and Messrs. Barnard, Whitmor and Fernald of Mrs. Stevens Candies; B. N. Rolleston of General Candy; Miss Schultz and Mr. Oblander of Bunte Bros.; Mr. Ross Fairman of McPhail's; Mr. A. G. Andrews of De Mets; Mr. Stein of Dutch Mill; M. E. and Price Hanson of Helen Harrison; and Mr. J. E. Clarke of Lamont Corliss.

Reading from left to right: A. Fisher, Mutual Paper Box Corp., Mrs. J. Krafft, B. L. Stein, Anton Mueller, N. Haffenberg, J. L. Clarke, Lamont Corliss & Co.



. . . National Sugar Refining Co. and subsidiaries report profits of $5,086,708 for the year 1943.

—MILK—

POWDERED---CONDENSED

WHOLE — SKIM SPRAY — ROLLER

SWEETENED SKIM SWEET CREAM FROZEN CREAM

— Cars or less —

You know why supplies are limited—we're doing our best to distribute fairly whatever is available.

Order as far in advance as possible.

SIMMONS DAIRY PRODUCTS, LTD.

13 W. FRONT STREET CINCINNATI 2, OHIO

Editorial

(*Continued from page* 16)

issued and procedures devised; and a start towards industrial co-operation instituted! But there is much to be done.

The candy industry and many other industries are learning to work together. We hope that more "Clearing House-Co-operative Enterprise" undertakings will be started. It may even be feasible to extend the facilities to include grocery or other retail outlet pick-ups. Once started, a co-operative undertaking is like the proverbial snowball—its size increases as it gathers momentum.

The War Production Board L-317 Ruling may best be considered as a blessing in disguise. We, here in America, accustomed to plenty, have been prone to waste and mis-use many of our material resources. To conserve and save, means that we are getting back to the teachings of our fore-fathers.

Discover Mapleine.. a LITTLE does a LOT

FRUITS AND FLAVORS SCARCE ? Let Mapleine help. A grand flavor for creams, fondants, bar goods, caramels. Helps spread scarce fruits, flavors, nuts.

SHORT ON CHOCOLATE ? Mapleine can help. Doesn't intrude its own flavor . . . brings out every bit of chocolate flavor, so you can use less chocolate in toppings, bar goods. No formula change needed.

WANT TO CUT COSTS ? Mapleine is three times as concentrated as vanilla. Won't cook out, won't fade in storage. A little flavors a lot.

Learn more about Mapleine's wartime uses. Order from your regular supplier or direct from Crescent Manufacturing Company, 659M Dearborn Street, Seattle 4, Washington.



MAPLEINE
IMITATION MAPLE FLAVOR
The "Extra Help" Flavor in Wartime

TOP Performance!

Top performance requires unquestioned quality plus wide experience. You get all in our

9 BURRELL Stars

★ CRACK-LESS Glazed Enrober Belting
★ THIN-TEX CRACK-LESS Glazed Belting
★ White Glazed Enrober Belting
(Double Texture: Single Texture: Aero-Weight)
★ Batch Roller Belts (Patented)
★ Feed Table Belts (Endless)
★ Bottomer Belts (Endless)
★ Carrier or Drag Belts
★ Cherry Dropper Belts
★ Innerwoven Conveyor Belting

Proven ability to "take it" has placed BURRELL Belting in practically all Confectionery Plants. Why not yours?

"BUY PERFORMANCE" IN BELTING
"BUY WAR BONDS FOR FREEDOM"

BURRELL BELTING COMPANY
413 S. Hermitage Ave., Chicago, Ill.

VANILLIN



Interior of Factory
WISCONSIN, U. S. A.

LIGNIN VANILLIN, C. P.
A Finer Vanillin of Exquisite Aroma.
A NATURAL SOURCE Vanillin originated and manufactured in the United States.
AROMATIC CHEMICALS AND ESSENTIAL OILS FOR FLAVORING PURPOSES.

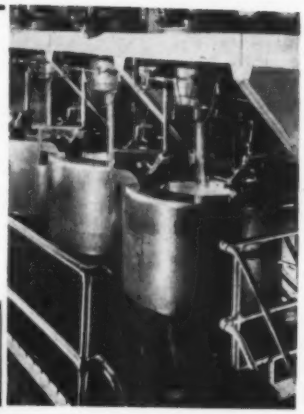
AROMATICS DIVISION
GENERAL DRUG COMPANY
644 Pacific St., Brooklyn, N. Y.
9 S. Clinton St., Chicago
1019 Elliott St., W., Windsor, Ont.



Your Candy's Form . . .

molds smoothly, easily in Douglas Molding Starch. Used by the confectionery industry for 20 years, this P&F product has proved its worth. Ask us about "preconditioned" starch, a special Douglas grade for new trays.

PENICK & FORD Ltd. Inc.
420 Lexington Avenue, New York 17, N. Y.



Note how ACCURATELY the printed designs are located on these bars . . .

The bars shown here are "run of the mill" examples of wrapping executed by the DF in 18 different candy plants . . . Notice how accurately the printing on the wrappers lines up with the sides and ends of the bars . . . Such perfect registration can be expected of the DF bar wrapper no matter how long the run. A superior type of electric-eye mechanism accounts for this.

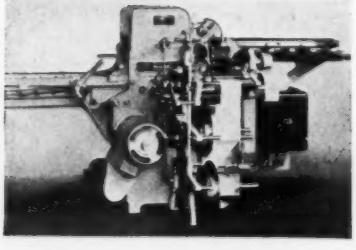
Specially designed for irregular shaped bars

The DF makes a smooth, boxlike wrap, no matter how irregular the bar may be. The wrapper is formed and sealed over breaker bars and tuckers, *not over the bar itself*. The resulting package provides perfect display of the printed design, and has the neat, attractive appearance that says "quality" at first glance.

Compact, smooth-running, and quickly adjustable for various sizes, the DF is a distinct contribution to plant efficiency.

Write for folder giving complete details

PACKAGE MACHINERY COMPANY
Springfield 7, Massachusetts
NEW YORK CHICAGO CLEVELAND LOS ANGELES TORONTO



The DF is a straight-through machine. Its narrow width permits placing it close to and parallel with the enrober belt, enabling operator to feed bars with the minimum of time and effort.



PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

What Users Want and Need in Postwar Packaging Machinery

By DOUGLAS S. KIRK*
Quaker Oats Company

THE main development of package machinery, operated as automatic equipment at speeds in excess of 25 to 30 units per minute, took place principally during the 15 year period following the start of World War I with but few exceptions. We have not had the advancement in automatic packaging machinery development during the last decade that we should expect. However, packaging materials have made greater strides in improvement than the machines with which to handle the new materials.

The fundamental principles or keynotes for the production of package machinery for the future must be the early or rapid development and production of equipment at low cost that will—

1—Provide the production of presently existing package types at a substantially lower package material, labor and transportation cost.

2—Increase the utility and consumer acceptance or appeal at equal or love overall packageing costs.

3—Lower capital cost of equipment so that an increase in the items packaged or pre-packaged may result.

4—Improvement of packages through use of new materials.

If these four principles are followed by the manufacturers of package machinery the advancement and growth of packaging will result with the benefit of an elemental increase in the industrial growth of this country.

The accomplishment of the four principles requires that complete package lines of (a) Much higher speeds than those presently must be obtained. (b) Much simpler package machinery than in most cases today, that is, freer of special parts, castings, or forgings, or fancy motion or gadgets. As many moving parts as possible should be eliminated. (c) Much more precision in all package equipment enabling the user to work to close tolerances which will be vital if new light weight or low cost materials are to be used. (d) Much less wear, mis-alignment, and fewer adjustments, which more often than not permit mal-adjustment.



Will Reduce Rejects

This is necessary to produce a higher percentage of merchantable packages, which will be extremely important at higher speeds to reduce the reject or cull packages. (e) Much more regard for the ability to accomplish desired results with the usual run of operating personnel available in the many classes of packaging plants. (f) Much closer coordination between the maker, user, and package material suppliers in working out the users packaging requirements. There has undoubtedly been a lack of mutual understanding between the three industries, package machinery maker, the material supplier, and the user.

Higher Speeds Cut Costs

Higher speeds obviously are necessary to reduce capital investments in both machinery and floor area, as well as direct packaging labor and supervision costs.

Simplifying and using standard procurable parts that make up packaging machinery is urgently needed and should be done by all package machinery manufacturers. A good start has been made already by some of the industry in a couple of classes of machines. I know this is a hard thing to accomplish as it will require a great deal of education of draftsmen, designers, and engineers. It seems that they are not content unless they can dream up something fancy with a lot of frills that look nice as graphite lines on tracing paper when in all probabiilty fewer lines indicating a standard steel shape or a standard bearing or gear is infinitely more economically sound for both maker and user. The same thing applies to motions, cams, connecting rods, moving parts of many types, starting and stopping of travel when this could be done with continuous line travel of the package, often times with stationery functional parts.

It is frequently said by the machinery manufacturer that their machines last or run too long. The market possibilities for package machinery should not be on repeat sales of the same equipment to the same customer, but on producing equipment that will improve the customer's package. The packaging field, as we know but seldom realize, is so tremendous and has so many potential consumers of packages that have not yet been reached, even with our large scale form of retail distribution in this country.

*A talk given before the AMA Packing Conference and Exposition in Chicago, March 28-31.



Here's one reason why you can't get all the Cellophane you need

TODAY, more than ever, Cellophane is demonstrating its effectiveness as a wrapping for candy. It helps protect the freshness and flavor of candy from the maker to the consumer. Today, however, you may not be able to get all the Cellophane you need. Why?

One reason is that Cellophane is going to the battle-fronts of the world as a protective wrapping for a tiny package this soldier carries . . .

This soldier carries his life in this tiny package. It contains the famous sulfa drug. Thanks to the discovery of this powerful guard against infection, thousands of lives are being saved on the battlefield.

The Du Pont Cellophane that helps protect the precious contents of this package is one of the reasons why you can't get all the Cellophane you need.

Other wartime jobs of Du Pont Cellophane are important, too . . . protecting food rations and medical supplies. The demands for these purposes have reduced the quantity available for essential civilian use. We appreciate your understanding and cooperation, and trust the day is not far off when you can again have all the Cellophane you need.

E. I. du Pont de Nemours & Co. (Inc.), Cellophane Division, Wilmington 98, Del.

Wartime uses of Cellophane prove its protective value

BELOW is the sulfa drug package found in every soldier's first-aid kit. Note the Cellophane wrap used by the Office of the Surgeon General. Use of Du Pont Cellophane on this and many other medical and food supplies of the armed forces is evidence of its outstanding protective value.



Du Pont Cellophane

DU PONT

BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

To return again to the requirements necessary to accomplish our four principles, precision with paper package machinery is a requirement not wholly considered in the past. If we realize we are handling paper board of 1/64″ or less in thickness, or wrappers 1/5 of 1/64″ in thickness, and some film sheets of 1/15 of 1/64″, it should bring to the engineer's attention that to successfully handle these materials, tolerances in the working parts in keeping with these thicknesses are a necessity if high speeds and quality production are to be accomplished. So far, practically all new and improved materials are more exacting in their demands of precision of equipment. They are harder to use, not easier.

The wear, alignment, and maladjustment of package equipment is a subject that calls for very thorough examination by the engineers, designers, and draftsmen. One criticism of both the maker and user probably is that package machinery engineers and designers do not have the opportunity of following up the continued operation of their equipment on a production basis. True, suggestions are made and picked up by the road men, but the designers are reluctant to change or improve the design unless satisfied from personal observation.

There is definitely a lack of appreciation and understanding on the part of the machinery makers of the way in which the equipment is to function under a commercial operating basis. It is not always possible due to the material characteristics to be handled, but usually semicommercial tests of more than a few minutes or a few hours run should be made in the machinery manufacturer's plant. This usually can be done, and it should pay by having the equipment perform as expected when installed. Too often the customer's plant is used as a laboratory for testing out new equipment that should be tested out in the machinery manufacturer's shop.

Servicing of equipment is expensive, I know, but possibly if we are to accomplish improved packages with high speed machinery, it may be a definite requirement; possibly a goal to be considered for the industry to work towards.

Consider Personnel Problems

The personnel problem of the operators and supervisors of the equipment we have always had with us. This is another thing that should be carefully studied by the manufacturers, and I suggest that it is something that even the Package Institute should consider. We all know it is human nature for two operators to handle the same machine differently, and it certainly is frustrating to the maker to see the equipment he designs operating in the user's plant with baling wire, rubber bands, extra springs, and many useless gadgets tied onto the machine. The production department of packaging operations need good equipment operators and not self styled "inventors" to hang unnecessary junk on the machines. It is possible that the Job Training Programs worked out for the war industries could be used in the future to train package machinery operators. However this may not work for the small organization.

One rarely sees operating instructions written by the manufacturer that are not too complicated, and oftentimes these instructions are disregarded or thrown out as soon as the machine is put in operation, or are not understood. It would be well for the industry to consider writing these instructions in the language and style that the "Joe Doakes" who operates the equipment will understand.

The coordination between the maker, user, and package material supplier has too often been lacking. What might be called a triple play, and instead of working out for mutual interest has resulted in an abundance of confusion due to "buck passing." It isn't the machine, it's the carton, or can, or bottle, or it isn't any of these but the coating or adhesive, and so on. I have no intention of intimating that there should be any close tie-up between any one machinery manufacturer and any one package supplier. When this has happened it has more often worked to decided disadvantages. There is need for each industry to understand the problems of the others.

Adhesives and coatings for war packaging have probably made the best start toward packaging advancement as well as increased production on some of the materials, which will bring them in line economically at the end of the war. To capitalize on these materials is going to require a great deal of expensive development work and research. We know from experience that research is expensive at its first cost. Money put into research should not be considered money spent but as money invested for future prosperity.

In the past it has usually been the practice when a new development is thought of to work it out in detail on paper which usually costs considerably more than the machine itself and is often not done at all for lack of having a customer to pay for such equipment. If a part of the drawing expense was put in to the construction of models to demonstrate the principles involved, the imagination of the prospective customer surely would be more easily captured. It usually works out that if a few packages are tried to prove a principle and produced as desired, out of a model run, the bugs and kinks can be taken out so that a commercially acceptable machine can be produced.

A Few Random Thoughts

A few thoughts at random on paper packaging equipment: It would be an advantage to eliminate the conventional type of glue or adhesive pots or applicators. The thermoplastic coating or adhesive should be worked out by the package supplier and the handling of this material on the packaging machine by the machinery manufacturer. The handling, adjustment and care required of glue wheels and pots on paper packing units is probably the greatest source of trouble with present day equipment.

Present day automatic weighing machines are far from performing as they should to give uniform weight. I am not trying to start an argument, but little is known of the behavior of the scale beam and the relation to its component parts. This question of weighing has always been bothersome and is one which will probably get worse when pepole are looking for work.

I do not like to make forecasts but I believe it is logical to assume that not many years after the cessation of hostilities we will have in this country a uniform weight package law which has many things to say in its favor. If this takes place, we may find that the merchandising and advertising experts will be willing to give up the billboard fronts they try to create on packages and with the necessity of trend towards lower cost packaging, the material savings to be gained will be emphasized. Some form of the technique of compacting or compression of bulky products will then have a commercial importance.

This brings a further possibility of a reversal in the trend so that a demand may be created for more round packages in place of rectangular.

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HARRY YOUNGMAN BROKERAGE COMPANY
2145 Blake Street
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Territory: Colo., Wyo., Utah, Idaho, Mont.

Package Machinery Company has announced production of ten special portable heat-sealing machines for major companies engaged in war work. The machines seal moisture-proof bags for vital war items, such as foodstuffs, airplane parts, or throat microphones used by American flyers.

The Lynch Corporation, manufacturers of glass forming, wrapping and packaging machinery, air compressors, refrigeration, aircraft parts, and grey iron castings report a 1943 profit of $454,905.35.

Packaging Conference Sets Record

The Fourteenth Annual Packaging Conference and Exposition at the Palmer House, Chicago, March 28th-31st set an all-time high in attendance. Over ten thousand visitors inspected interesting exhibits, of packaging equipment, paper companies, adhesive companies, and related products. The conferences were well attended and the subjects interesting. THE MANUFACTURING CONFECTIONER is reprinting one of the Conference addresses in this issue.

Nashua Paper Director Dies

Winthrop Carter, a director of Carter, Rice and Co., died Feb. 22, at Boston. Mr. Carter became president of the Nashua Gummed and Coated Paper Co. in 1907.

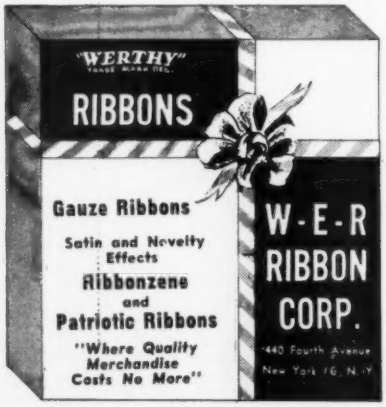
Used Equipment Priorities Revised

No priorities are needed to buy used candy equipment if such equipment is available. General Limitation Order L-292 of WPB removes previous restrictions; 13,000 pounds of aluminum will be released per quarter to improve the performance of food processing machinery. New equipment restrictions have not been lifted.

Labor Relations

"Qualities of a Good Boss," and "How to Get Out More Work," by Glenn Gardiner, published by Elliott Service Co., New York, provides methods by a series of self-appraisal aids for "bosses" who "can take it" and wish to improve themselves. These booklets are recommended.

Monsanto Chemical Co. and American subsidiaries report a net income of $5,365,775 for 1943. . . . **Rosenberg Bros. & Co.** of San Francisco have published "Years Mature," a book describing the organization, history, present set-up and products. This book is a work of art. . . . The Army Navy "E" has been awarded to the Signal and Magnesium Division of the **Universal Match Corp.,** St. Louis, according to Mr. A. H. Rosenberg, President of the Corp.





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We recommend our Welded-Edge Ribbons
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BOOKLETS and REPRINTS

Reprints are available of a number of articles which have appeared in THE MANUFACTURING CONFECTIONER. They compose a large portion of the current literature of the Industry. Many manufacturers find them suitable to accompany sales messages and also to add to their library of information on the candy and chocolate industries.

Now available are the following:

Candy Maker's Place in Manufacturing for Retail
By George A. Eddington..... 10c

Chocolate Coating Candies by Machine
By Mario Gianini 50c

Confectionery Factory Maintenance
By John H. Bier..... 50c

Fats in Confectionery—"Meeting Coconut Oil Shortage"
By C. E. Price and J. A. O'Malley..... 15c

Fat or Lean Coatings
By Robert Whymper 10c

Improved Methods in the Manufacture of Fondant Goods
By H. S. Paine and J. Hamilton..... 25c

Modern Methods of Candy Scrap Recovery
By Wesley H. Childs..... $1.00

National Candy Company Solves Problem of Inactive Salesmen
By C. M. Said 10c

New Uses of Glycerine in Confectionery
By Georgia Leffingwell, Ph.D. and Milton A. Lesser, B. Sc. 20c

Principles and Design of Chocolate Cooling Tunnels
By Edward W. Meeker.....$1.00

Purpose of Conching Chocolate, The
By Robert Whymper and Charles Shillaber..... 20c

Soy Products in Candy
By Dr. Ralph M. Bohm..... 25c

Steam Traps in the Candy Industry
By E. M. Johnson and J. W. Hieronymus..... 20c

Vitamins in Confectionery
By Norman F. Kennedy..... 20c

War-Time Changes in Food Distribution
By Carl W. Dipman..... 20c

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CANDY manufacturers both large and small *prefer* IDEAL WRAPPING MACHINES because they provide the economies of fast handling along with *dependable, uninterrupted operation.* In use the world over, IDEAL Machines are building a service record that stands unmatched and unchallenged! Our unqualified guarantee is your protection. Two models available: SENIOR MODEL wraps 160 pieces per minute; the new High Speed Special Model wraps 325 to 425 pieces per minute. Investigation will prove these machines are adapted to your most exacting requirements.



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Easy Way to De-Scale Your Tempering Tanks!

STORAGE and tempering tanks, tables, cream beaters, and other water-cooled equipment cannot operate at peak efficiency as long as insulating deposits of lime-scale impair heat transfer efficiency.

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HELP WANTED

HELP WANTED—Experienced, all-around Candy Maker. If the right man we will want him to take full charge of production. Apply at once advising what your specialties are and whom you have been employed by for the past ten years. Correspondence kept strictly confidential. Sisco-Hamilton Co., 514 So. Loomis St., Chicago 7, Illinois.

WANTED—Pan man. Must be all around man, capable taking charge of pan room. Position now open with national concern in Los Angeles. Permanent work at top pay under best working conditions. Please write details at once, listing experience, age, when available, family status, etc. Replies will be kept confidential. Here's your chance to settle down in sunny Southern Calif. Hurry! Address D-4443, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

HELP WANTED—Candy maker for large progressive retail candy chain located San Francisco bay area; good future for right man. In reply give full information as to past employment, age, marital status, etc. Address D-44410, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

Supt. with years of practical experience, in all kinds and grades of better candies. Fully capable of handling any number of help for high production. Address D-4446, c/o THE MANUEACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

PAN MAN FOREMAN WANTED—Experienced in Chocolate, cold and steam grossing. Must be good producer. Good post-war position. Write experiences, past connections, age and salary. School House Candy Company, 296 Charles Street, Providence, Rhode Island.

ENROBER MAN—Excellent opportunity for right man. With an old established company manufacturing popular bar goods exclusively. Address D-44413, giving full particulars c/o MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

HELP WANTED

CANDY MAKER experienced in high quality candies for progressive retail chain. Permanent position, pleasant working conditions, convenient subway connection, near express station. Write full details, your experience, and salary expected. Gregor Chocolates, 55 E. 11th St., New York 3, N. Y.

SUPERINTENDENT WANTED—By a New York City manufacturer specializing in five cent Bars and few other items. Seeking an energetic live wire experienced superintendent, one who understands both quality and production. Good salary and bonus to a man of proven ability. Address C-3442, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

WANTED—Candy Maker experienced in spinning filled goods. Steady job in the State of Michigan. Address B-2444, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

WORKING SUPERINTENDENT: A splendid opportunity for a good candymaker thoroughly experienced in all fields. Preferably a man who has had chain retail and commercial candy experience. Ours is a company of over thirty years operation specializing in a general line of quality packaged candy. Located in Midwest Area. Please write stating FULL particulars about past experience, when available, salary expected, age. Address B-2447, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

HELP WANTED—Expert woman candy maker for large high grade retail kitchen located in Chicago. This is an opportunity for a woman with executive ability who understands all phases of candy making. Address B-2441, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

Candy Maker experienced in creams and gums—also hard candies—must be familiar with Mogul and Enrober operation. Permanent position in Oklahoma. Write and give age and salary expected. Address B-2446, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

HELP WANTED—Working foreman for small hard candy crew. Also one for cream dept. Write Warren Watkins Candy Factory, 768 Merchant St., Los Angeles 21, Cal. Now.

POSITIONS WANTED

A-1 all around retail candy maker. Thoroughly experienced on full general line quality retail goods. A good sound, reliable, practical workman. Sober, steady, clean. Foreman qualifications. Wife is fine chocolate dipper. I am seeking position where above qualities and ability to deliver the goods will be utilized. Only steady, year around job with top salary will be considered. Available 30 days. For details address D-44412, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

MAN of integrity and ability who has had over twenty years factory and retail experience would like position to manage place where owner or head has been called to service, can personally make all candies, train help and manage business efficiently. Address C-3447, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

WANTED a position as foreman or assistant superintendent. Have been a foreman in the casting department for twenty years. I can make any kind of high-grade soft centers. Candy for bulk and chain store trade. Gums, marshmallow, crystalized goods, all kinds of icing goods, also caramels, nougats, fudges and any kind of summer goods. Would like to work in Chicago if possible, but will consider any good proposition elsewhere. Can give the best references. Am forty-three years of age, married. Will be available in April. Address C-3441, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

SUPERINTENDENT with 35 years of practical experience in high grade package and counter candies. Address L-124310 c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

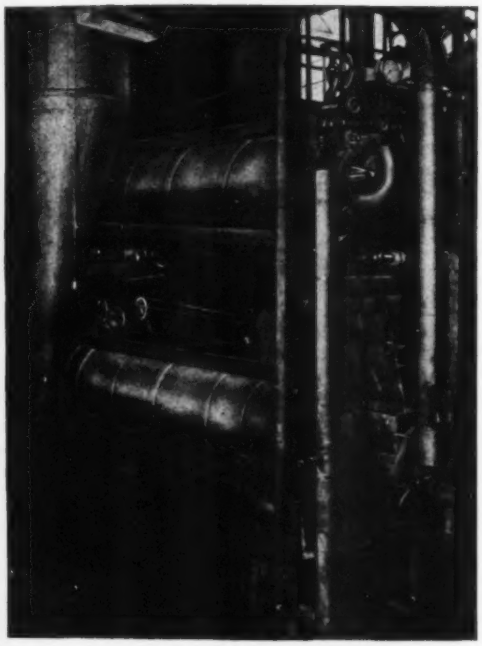
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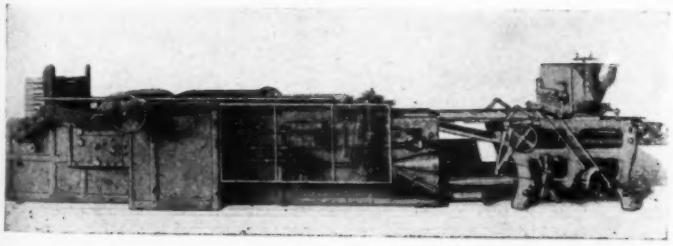
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- National Equipment Fully Automatic Steel Mogul.
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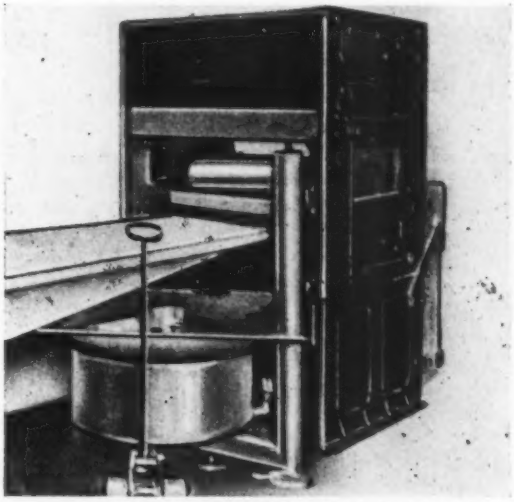
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WE WILL PAY YOU CASH FOR A SINGLE MACHINE OR ENTIRE PLANT . . . Send list of your idle-surplus equipment!



24" NATIONAL EQUIPMENT ENROBER WITH REMOVABLE TANK

UNION STANDARD EQUIPMENT CO.

318-322 Lafayette Street New York 12, N. Y.



POSITIONS WANTED

POSITION WANTED: Experienced Pattie Maker would accept position to make cream patties, wages based on poundage. Full or part time. Address C-3446, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

A YOUNG WELL EXPERIENCED candy foreman desires change for a better paid position. Have had a sound training in Europe and many years practical experience in the U.S.A., and worked with modern hard candy machines. Vacuum cookers, chocolate enrobers, depositors, moguls, etc. I am able to manufacture a full line of high class filled and unfilled hard candies, all kinds of filled and solid chocolates, patties, caramels, jellies, etc. for bulk and package. Having my own formulas, I also make costs and know how to handle help efficiently. I am a family man, draft exempt (4F), and prefer New York City. Address K-11433, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison Street, Chicago, Ill.

WOULD LIKE position with small wholesale house or retail store. I have all round experience, 23 years of making candy. Am only interested in high grade candies. References upon request. Prefer to locate in New York City. Address C-3449, c/ THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

SALES REPRESENTATIVE

SALESMEN WANTED—Salesmen calling on the jobbing trade and department stores to sell Four Star Cola fountain syrup and concentrate. Those covering midwestern states preferred. Ohio and western Pennsylvania accepted. Bud Candy Co., 208 W. St. Clair Ave., Cleveland, Ohio.

DO YOU HAVE PRODUCTS for candy manufacturers? I will guarantee volume of sales and can render service for the product. Long experience in the candy industry and large following. Located in Chicago. G-7436, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

MACHINERY FOR SALE

FOR SALE—50 Gal. Savage Marshmallow Mixer with Pulley Drive. Jerome M. Schulman Co., 2520 N. Pulaski, Chicago, Ill.

FOR SALE—1 No. 88 D.S. J.M. Lehmann Cracker & Fanner—Good running condition. Address D-4447, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

MACHINERY FOR SALE—Copper steam jacketed kettle, Racine chocolate melting kettle with motor, 2-30 gallon glass lined tanks, one-250 Gallon copper tank, in blocked. Bud Candy Co., 208 W. St. Clair Ave., Cleveland, Ohio.

1 PACKAGE MACHINERY F-9 Machine, complete with motor, for wrapping 1 lb. boxes in cellophane, completely rebuilt and in good working order. Address B-2449, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

FOR SALE—Two Saxmayer Box Tyers in good condition, $100.00 each. Address C-3444, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

MACHINERY FOR SALE—Following surplus candy equipment for sale—in one lot—not individually. Simplex Gas Vacuum Cooker, Hard Candy Puller, York Batch Roller, Two Racine Sucker Machines, Racine Caramel Cutter, Coconut Cutter, Caramel Cutter, Caramel Mixing Kettle. Write or wire Candy Bros. Mfg. Co., Inc., St. Louis, Mo., where equipment may be inspected.

15 COPPER STEAM KETTLES, 15 pounds pressure, 10" diameter, 6½" deep, $30. each. One 200 pound Chocolate Kettle, $100. Address J-10437, c/o THE MANUFACTURING CONFECTIONER, 400 West Madison St., Chicago, Ill.

MACHINERY FOR SALE

FOR SALE—2—3½'x8' Steel Water Cooled Slabs; 3—Batch Rollers, 1 8-foot, 2—7 foot; 1—Large Copper Revolving Pan no coils; 2—Forced Draft furnaces. Write or wire Tip Top Candy Co., Bossier City, La.

FOR SALE—Racine Cream Beater 5" Side Outlet Belt driven. Like new. Address L-12434, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

MISCELLANEOUS

FOR SALE—20,000 lb. good clean scrap candy. This scrap has an average of 65 lb. sugar to 35 lb. corn syrup. For further information please address D-4445, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

WANTED TO BUY—Small, retail candy shop. At present using at least 10-15 bags of sugar per week or more. Will pay cash. Address D-44411, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

WANTED TO BUY — Whole or broken Maraschino type cherries, brine or processed. Chase Candy Company, St. Joseph, Mo.

POST WAR — Small candy manufacturer wanted, New York or vicinity, to fill novelty containers and to tie-on for an old established confectioner's supply house. Address L-12432, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

WANTED—Candy factory with approximately 2000 bags per year sugar quota. DeRoss Candy Co., 1222 West Washington Blvd., Los Angeles, California.

WILL BUY small or medium candy plant, general line sugar candies, consider any location. Write full details Roger Seligman, 115 Central Park West, New York, N. Y.

CANDY STORE WANTED where one can make his own candies. Address A-1442, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.



MISCELLANEOUS

WE BUY & SELL

ODD LOTS • OVER RUNS • SURPLUS

"Cellophane" BAGS

SHEETS•ROLLS•SHREDDINGS

Cellophane rolls in cutter boxes 100 ft. or more

ALSO MADE OF OTHER CELLULOSE FILM

Wax - Glassine Bags, Sheets & Rolls

Tying Ribbons-All Colors & Widths

Scotch Tape Clear & Colors

Diamond "Cellulose" Products

Harry L. Diamond
Sales Representative
1409 So. Michigan Ave. Chicago, Ill.

MACHINERY WANTED

WANTED — One used Anderson Cellophane Bag Making Machine. Send full particulars, price, etc. to Chase Candy Company, St. Joseph, Missouri.

WANTED — Late model Igou stick candy spinning machine, with rolls and motor. Quote best cash price, and full description. Address D-4441, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

3 foot Cream Ball Beater. Will pay cash. Address D-4442, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

WANTED — Almond Paste grinder AC current or hand style. Caramel Cooker with agitator. State size. Caramel Wrapper. State size of caramel it wraps. Address D-4444, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

WANTED—Brightwood box machine & Whiz volumetric packer. Candy Crafters, Inc., Stewart & Union Sts., Lansdowne, Pa.

WANTED—Savage Bros., Model 'S' Open fire mixer either number one or two, double action break-back type. Motor 220 volt 3 phase 60 cycle A.C. with kettle. Will pay top price. Chas. C. Walker, Groveland, Florida.

MACHINERY WANTED

WANTED — 75 lb. capacity Candy Pulling Machine. Give price, condition and location. Address D-4448, c/o THE MANUFACTURING CONFECTIONERY, 400 W. Madison St., Chicago 6, Ill.

WANTED — Reiche Hollow Mould Outfit with or without moulds, or will buy 2 Elma Fillers and 2 Reiche Tumblers separately. Address D-4449, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

WANTED — Copper revolving pans preferably but not necessarily 38" — with or without steam coils. Candy Crafters, Inc., Stewart & Union Sts., Lansdowne, Pa.

WANTED — An Automatic Friend Roll cutting machine. Racine Snow Plow Beater, 5 ft. size, with side outlet, motor or belt driven. COMMUNITY INDUSTRIES ASS'N., 811 So. Hamilton Street, Sullivan, Illinois.

MACHINERY WANTED—Second-hand fully automatic mogul. Late type enrober. Schuler Chocolates, Inc., Winona, Minnesota.

WANTED—Will pay cash for Simplex Vacuum Cooker, gas or steam. Also Rost or similar hard candy machine, steam jacketed kettles and other hard candy equipment. Address B-2442, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

1-16" Enrober complete with bottoming attachment and cooling tunnel; 1 3-Roll Chocolate Refiner; 1-Twin or Triple Chocolate Liquor Mill; 1-Bausmann Disc liquor Mill; 1-Rostoplast, Lichtenberg or similar Plastic Hard Candy Machine; 1-Simplex Vacuum Cooker; 1-Hard Candy Batch Spinner, York or roller type; 2-3x8 Metal Slabs. Advise condition, price and where they can be seen. Address C-3448, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

MACHINERY WANTED

MACHINERY WANTED—16" Enrober with feed table with or without bottomer and tunnel. Describe fully and quote price. Address C-3443, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

WANTED: Steel or wood moguls, automatic ball machines, and starch dryers. Interested in modern equipment in good operating condition. Give full details, price, and where equipment may be inspected. Will pay cash and remove immediately. Address C-3436, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St.,

Interested in purchase of creamer, dipping tank, etc. Address B-2445, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

MACHINERY WANTED: URGENTLY WANTED: Copper Coating Pans and Vacuum Pans; Tablet Machines; Dryers and Mixers; Jacketed Copper and Aluminum Kettles. Describe fully and quote prices. Address A-1433, c/o THE MANUFACTURING CONFECTIONER, 400 West Madison Street, Chicago, Ill.

MACHINERY WANTED—A Model K Kiss Machine. Give full particulars. Also price, etc. Cavell Candy Co., 1319 Henry St., Detroit, Mich.

MACHINERY WANTED—One 24" Chocolate Enrober or Chocolate Coater. One Steel Mogul. Address C-3445, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago 6, Ill.

WANTED—Dayton, Racine or Ball 5 ft. Cream Beater. Advise condition and quote lowest price for cash. Address B-2443, c/o THE MANUFACTURING CONFECTIONER, 400 W. Madison St., Chicago, Ill.

Bauer Split Nut and Bauer Whole Nut Blanching Machines. Will pay good price, please send complete description, condition of machine, lowest cash price, and manufacturers catalog illustration if possible, in first letter. Address I-9439, c/o THE MANUFACTURING CONFECTIONER, 400 West Madison St., Chicago, Illinois.

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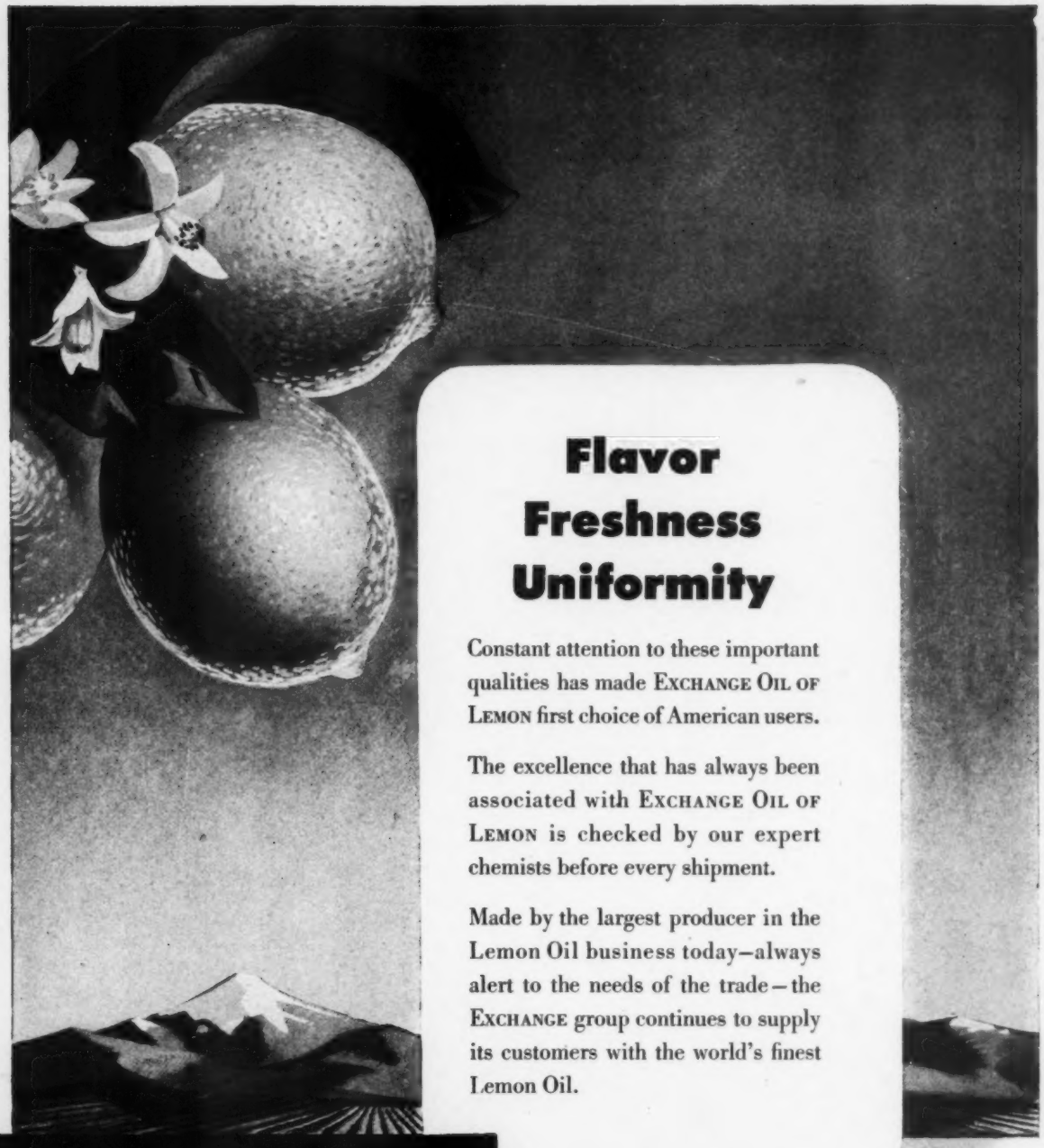
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